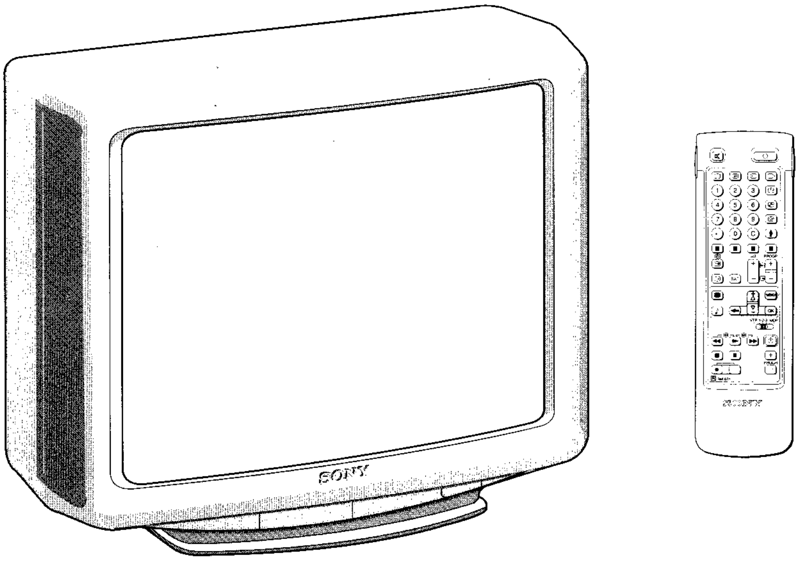
SERVICE MANUAL

AE-3 CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-S2951A	RM-831	Italian	SCC-J26C-A	KV-S2951K	RM-831	OIRT	SCC-J29C-A
KV-S2953B	RM-831	French	SCC-J27C-A	KV-S2952U	RM-831	UK	SCC-J24C-A
KV-S2951D	RM-831	AEP	SCC-J23C-A				
KV-S2953E	RM-831	Spanish	SCC-J28C-A				



MICROFILM

TRINITRON® COLOR TV

SONY®

ITEM MODEL	Television System	Channel Coverage	Colour System
Italian	B/G/H, D/K	B/G/H VHF: E2-E12 UHF: E21-E69 Cable TV (1): S1-S41 Cable TV (2): S01-S05, M1-M10, U1-U10 ITALY VHF: A-H UHF: H1, H2 D/K VHF: R01-R12 UHF: R21-R69	SECAM, PAL NTSC 3.58 (video input only) NTSC4.43 (video input only)
French	L, B/G/H, I	L VHF: F2-F10 UHF: F21-F69 Cable TV: B-Q B/G/H VHF: E2-E12 UHF: E21-E69 Cable TV (1): S1-S41 Cable TV (2): S01-S05, M1-M10, U1-U10 ITALY VHF: A-H UHF: H1, H2 I B21-69	SECAM, PAL NTSC 3.58 (video input only) NTSC4.43 (video input only)
AEP	B/G/H, D/K	B/G/H VHF: E2-E12 UHF: E21-E69 Cable TV (1): S1-S41 Cable TV (2): S01-S05, M1-M10, U1-U10 ITALY VHF: A-H UHF: H1, H2 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: B-Q UHF: S21-S41	SECAM, PAL NTSC 3.58 (video input only) NTSC4.43 (video input only)
Spanish	B/G/H, D/K	B/G/H VHF: E2-E12 UHF: E21-E69 Cable TV (1): S1-S41 Cable TV (2): S01-S05, M1-M10, U1-U10 ITALY VHF: A-H UHF: H1, H2 SECAM D/K VHF: R01-R12 UHF: R21-R60	SECAM, PAL NTSC 3.58 (video input only) NTSC4.43 (video input only)
OIRT	B/G/H, D/K	B/G/H VHF: E2-E12 UHF: E21-E69 Cable TV (1): S1-S41 Cable TV (2): S01-S05, M1-M10, U1-U10 ITALY VHF: A-H UHF: H1, H2 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: B-Q UHF: S21-S41	SECAM, PAL NTSC 3.58 (video input only) NTSC4.43 (video input only)
UK	I	UHF: 21-69	SECAM, PAL NTSC 3.58 (video input only) NTSC4.43 (video input only)

MODEL	Italian	French	AEP	Spanish	OIRT	UK
Power Consumption	138W	156Wh	154W	156Wh	154W	212W

SPECIFICATIONS

Picture Tube	Super Trinitron Wide Approx. 72 cm (29 inches) (Approx. 68 cm picture measured diagonally) 110° -deflection

Rear/Front Terminals

[REAR]

⇥ 21-pin Euro connector (CENELEC standard)
- Input for audio and video signals
- Input for RGB
- Outputs of TV video and audio signals

S↦2/⇥S2 21-pin Euro connector
- Input for audio and video signals
- Input for S video
- Outputs of TV video and audio signals (selectable)

S↦4/⇥S4 21-pin Euro connector
- Input for audio and video signals
- Input for S video
- Outputs of TV video and audio signals (monitor out)

⇥S 2 ,⇥S 4 S video inputs - 4 pin DIN
⇥ Audio inputs (L, R) - phono jacks
S↦ S video output - 4 pin DIN
↦ Audio outputs - phono jacks
↦ Audio outputs (variable) - phono jacks
External speaker terminals : 2-pin DIN (5)

[FRONT]

⇥ 3 Video input - phono jack
⇥3 Audio inputs - phono jacks
⇥S3 S video input - 4-pin DIN
Ω Headphone jack : stereo minijack

Sound output	2x30W (music power) 1x30W Centre 2x15W Surround
Dimensions	Approx. 702x558x540 mm
Weight	Approx. 53 kg
Supplied accessories	Remote Commander RM-831 (1) Scroll Commander RM-60 (1) Batteries R6 (2) Surround speaker (2) Surround Loudspeaker lead (2)

Other features

- TOP-text (KV-S2951D)
- FASTEXT, NICAM (KV-S2953B/S2953E/S2952U)
- DNR (Digital Noise Reduction)
- Scroll Commander
- Dolby Digital Surround System
- 100Hz Digital Plus
- Graphic Equalizer
- PIP (picture in picture)
- Multi-PIP

[RM-831]

Remote control system	infrared control
Power requirements	1.5V dc 1 battery IEC designation R6 (size AA)
Dimensions	Approx. 65x225x21 mm (w/h/d)
Weight	Approx. 157g (Not including battery)

Design and specifications are subject to change without notice.

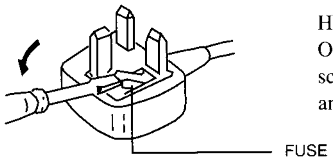
Model name Item	KV-S2951A	KV-S2953B	KV-S2951D	KV-S2953E	KV-S2951K	KV-S2952U
Pal Comb	ON	ON	ON	ON	ON	ON
PIP	ON	ON	ON	ON	ON	ON
RGB Priority	ON	ON	OFF	OFF	OFF	OFF
60 Programs	OFF	OFF	OFF	OFF	OFF	OFF
PAL PLUS	ON	ON	ON	ON	ON	ON
DOLBY	ON	ON	ON	ON	ON	ON
DSP	OFF	OFF	OFF	OFF	OFF	OFF
EQUALIZER	ON	ON	ON	ON	ON	ON
SUB TUNER	OFF	OFF	OFF	OFF	OFF	OFF
PAP	OFF	OFF	OFF	OFF	OFF	OFF
MLT.PIP	ON	ON	ON	ON	ON	ON
Scart 1	ON	ON	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON	ON	ON
Front 3	ON	ON	ON	ON	ON	ON
Scart 4	ON	ON	ON	ON	ON	ON
DYN. CONV.	OFF	OFF	OFF	OFF	OFF	OFF
PIC. ROT.	ON	ON	ON	ON	ON	ON
Language Preset	Italian	French	German	Spanish	OIRT	English

WARNING (KV-S2952U only)

The flexible mains lead is supplied connected to a **B.S. 1363** fused plug having a fuse of **5 AMP** capacity. Should the fuse need to be replaced, use a **5 AMP FUSE** approved by **ASTA** to **BS 1362**, ie one that carries the ASTA mark.

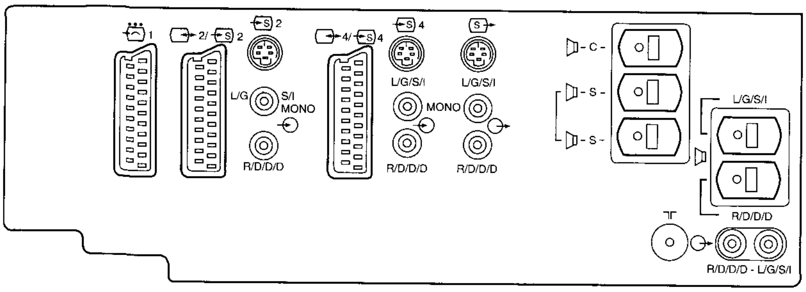
IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOR YOUR SOCKET OUTLETS IN YOUR HOME. IT SHOULD BE CUT OFF AND AN APPROPRIATE PLUG FITTED. THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE SOCKET OUTLET.

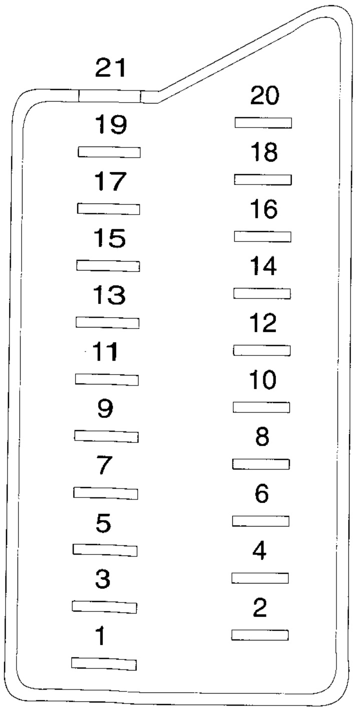
When an alternative type of plug is used it should be fitted with a **5 AMP FUSE**, otherwise the circuit should be protected by a **5 AMP FUSE** at the distribution board.



How to replace the fuse.
Open the fuse compartment with the screwdriver blade
and replace the fuse.

21 pin connector (⇥1, Ⓢ→2/→Ⓢ2, Ⓢ→4/→Ⓢ4)

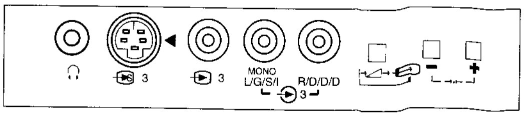




Pin No		Signal	Signal level
1	○	Audio output B (right)	Standard level: 0.5Vrms Output impedance:less than 1kohm*
2	○	Audio input B (right)	Standard level:0.5Vrms Input impedance:More than 10kohms*
3	○	Audio output A (left)	Standard level:0.5Vrms Output impedance:less than 1kohm*
4	○	Ground (audio)	
5	○	Ground (blue)	
6	○	Audio input A (left)	Standard level:0.5Vrms Input impedance:More than 10kohms*
7	○	Blue input	0.7V±3dB, 75ohms, positive
8	○	Function select (AV control)	High state (9.5—12V):Part mode Low state (0—2V):TV mode Input impedance:More than 10kohms Input capacitance:Less than 2nF
9	○	Ground (green)	
10	○	Open	
11	○	Green	Green signal:0.7V±3dB. 75ohms, positive
12	○	Open	
13	○	Ground(red)	
14	●	Ground (blanking)	
15	○	Red input	0.7V±3dB, 75ohms, positive
	—	(S signal) croma input	0.3V±3dB, 75ohms, positive
16	○	Blanking input (Ys signal)	High state (1—3V) Low state (0—0.4V) Input impedance:75ohms
17	○	Ground (video output)	
18	○	Ground (video input)	
19	○	Video output	1V±3dB, 75ohms, positive Sync:0.3V(−3, +10dB)
20	○	Video input	1V±3dB, 75ohms, positive Sync:0.3V(−3, +10dB)
	—	Video Input/Y (S signal)	1V±3dB, 75ohms, positive Sync:0.3V(−3, +10dB)
21	○	Common ground (plug, shield)	

○ Connected ● Not Connected (open) * at 20Hz - 20kHz

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75 ohm , positive Sync. 0.3V -3/+10 dB
4	C (S signal) input	0.3V ± 3dB 75 ohm , positive Sync.



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CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND, IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE PUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

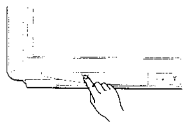
SECTION 1 GENERAL

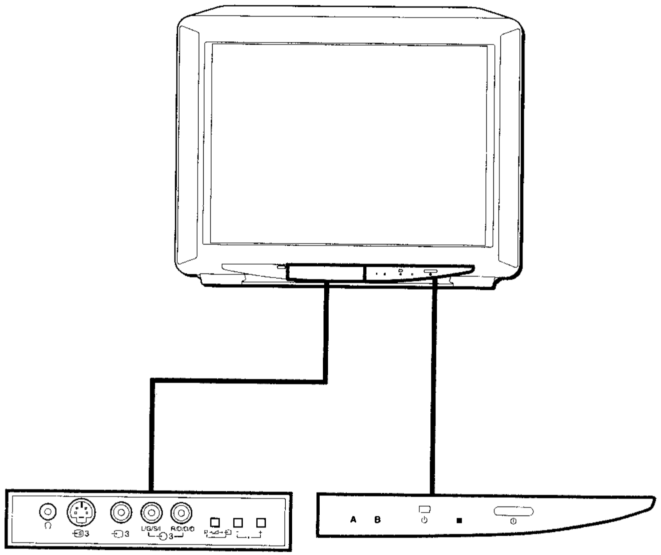
The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

Overview

This section briefly describes the buttons and controls on the TV set and on the Remote Commander. For more information, refer to the pages given next to each description.

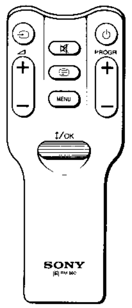
TV set - front



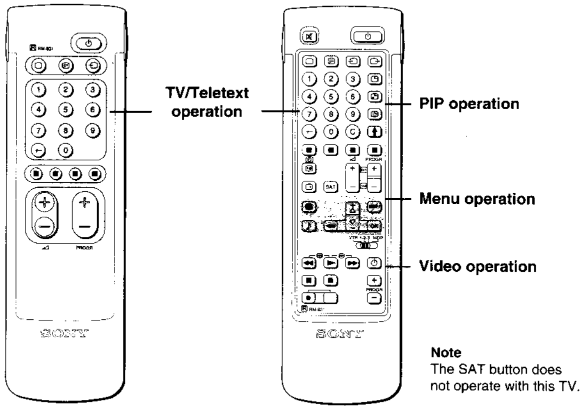


Symbol	Name	Refer to page
Ⓘ	Main power switch	38, 45
⏻	Standby indicator	45
A-ⓄⓄ-B	Stereo A/B mode indicators	47
🎧	Headphones jack	55
→Ⓢ 3, →▢ 3, →◯ 3	Input jacks (S video/video/audio)	55
P → ◿ → →▢	Function selector (Programme/volume/input)	45
–/+	Adjustment buttons for function selector	45

Scroll Commander RM-860



Remote Commander RM-831



Simple side

Full-Function side

Note
The SAT button does not operate with this TV.

TV/Teletext operation

Symbol	Name	Refer to Page
🔇	Muting on/off button	46
⏻	Standby button	45
▢	TV power on/TV mode selector button	45
⊜	Teletext button	46
→▢	Input mode selector	46
▢→	Output mode selector	56
1,2,3,4,5,6, 7,8,9 and 0	Number buttons	45
–/--	Double-digit entering button	45
C	Direct channel entering button	44
◿ +/–	Volume control button	45
PROGR +/–	Programme selectors	45
⊜⊜	Teletext page access buttons	52
●	Picture adjustment button	47
♪	Sound adjustment button	47
⊕	On-screen display button	46
⊜	Teletext hold button	52
◷	Time display button	46
■■■■	Fastext buttons	52

PIP (Picture-in-picture) operation

Symbol	Name	Refer to Page
◔	PIP on / off button	50
↑	PIP source selector	50
◔	Swap button	50
◔	PIP position changing button	50

Menu operation

Symbol	Name	Refer to Page
MENU	Menu on / off button	38
△+/▽–	Select buttons	38
OK	OK (confirming) button	38
←	Back button	38
↕/OK	Scroll Commander: Roller to select/ confirm menu functions	38

Video operation

Symbol	Name	Refer to Page
VTR1/2/3 MDP	Video equipment selector	57
◀◀ ▶ ▶▶ ■ ❚❚ ● ⏻ PROGR +/–	Video equipment operation buttons	57

Getting Started

Step 1 – Connection

❶ Connect the speakers

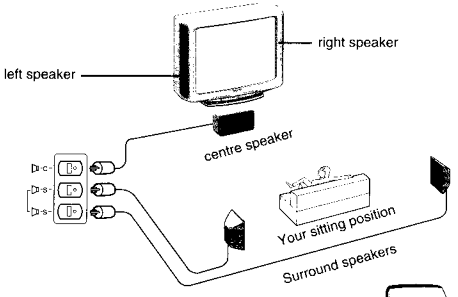
Notes:
- Connect the speakers using the leads provided making sure to observe the following polarity: The striped lead is (+) and should be connected to the red terminal on the speaker. The black lead is (–) and should be connected to the black terminal on the speaker.

Dolby (*) Pro Logic Surround requires normally 5 speakers, whose functions are as follows:
Centre speaker: to anchor the stable sound image, like dialogue, to the TV screen.
Left and Right front speakers: for the normal two-channel stereo broadcasts.
Surround speakers: for the special effects created by the surround channel.

To obtain the full benefit of your Dolby Pro Logic Surround TV, the speakers should be positioned as shown below:

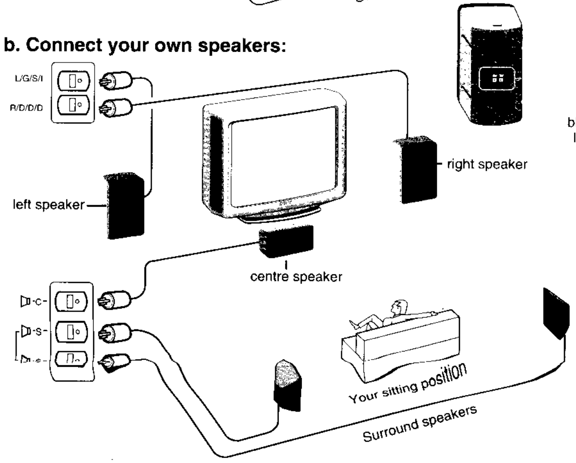
Before switching on: connect the speakers to the TV set.

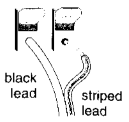
a. Connect the speakers provided only:


right speaker
left speaker
centre speaker
Your sitting position
Surround speakers

Note:
If you prefer to use your own speakers, make sure they are at least 8 Ω impedance and are magnetically shielded otherwise picture distortion may occur.

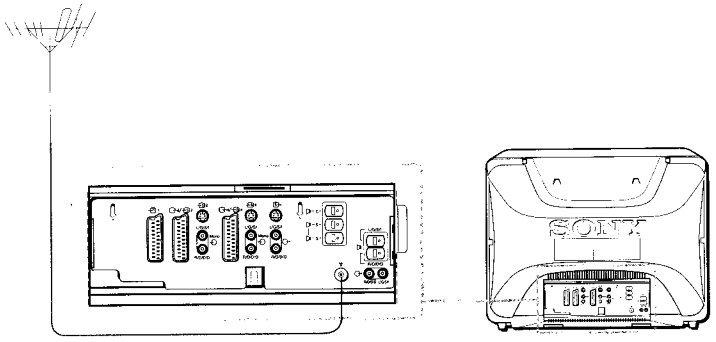
b. Connect your own speakers:


L/G/S/I
R/D/D/D
left speaker
right speaker
centre speaker
Your sitting position
Surround speakers


black lead
striped lead

(*) Manufactured under license from Dolby Laboratories Licensing Corporation. DOLBY, the double-D symbol ⅅⅅ and »PRO LOGIC« are trademarks of Dolby Laboratories Licensing Corporation.

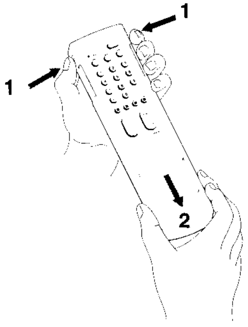
❷ Connect the aerial



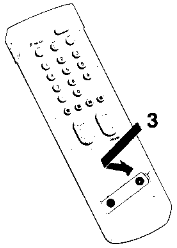
Fit an IEC aerial connector attached to 75-ohm coaxial cable (not supplied) to the ⫪ socket at the rear of the TV. Make sure to use an aerial cable corresponding to the relevant regulations.

Step 2 – Preparation

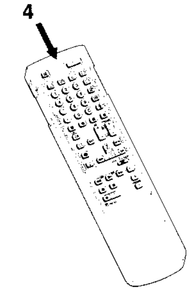
Insert the batteries into the Remote Commanders



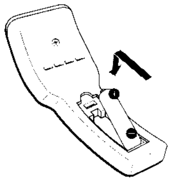
Remove the cover.



Check the correct polarities.

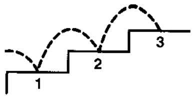


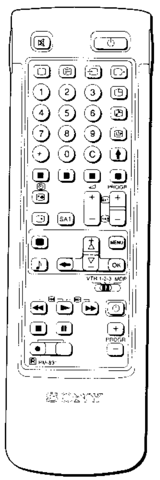
Refit the outside cover making sure that the Full-Function side is visible to use the menu in Step 3.



Check the correct polarities.

Step 3 Tuning in to TV Stations





Once you have set up the TV, you can choose the language of the menu. Then you should preset the channels (up to 100 channels) by choosing either the automatic or manual method.

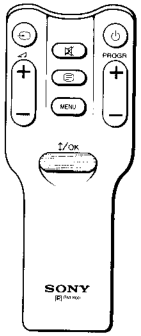
The automatic method is easier if you want to preset all receivable channels at once. Use the manual method if you only have a few channels and want to preset channels one by one. The manual method is also convenient for allocating programme numbers to various video input sources.

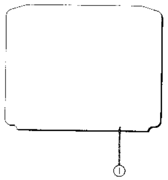
Before you begin

- Check that the Full-Function side of the Remote Commander is visible.
- Locate Menu operation buttons on the Remote Commander. They are shaded in the illustration at the left.

Easy Menu operation using the Scroll Commander

In addition to our double-sided Remote Commander, your TV set is supplied with an extra Remote Commander. The »Scroll Commander« works with a roller for convenient, fast-access operation of the menu functions.
Move the roller upwards to move the cursor upwards, move the roller downwards to move the cursor downwards, press the roller to confirm a selection. The other buttons on this commander have the same functions as the respective buttons on the double-sided Remote Commander.





To go back to main menu:
Keep pressing ⬅.

To go back to the normal TV picture:
Press MENU. Normal TV picture will be restored after one minute if menu functions are not selected.

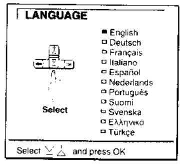
Note on the Demo function:
If you choose Demo in the Installation menu, you can see a demonstration of the menu functions.
Press MENU to stop the function.

❶ Choose a language

1 Depress ① on the TV.
The TV will switch on. If the standby indicator on the TV is lit, press ◯ or a number button on the Remote Commander.

2 Press the MENU button. MENU
The LANGUAGE menu appears. (See Fig. 1)

3 Select the language you want with △+ or ▽– and press OK.



LANGUAGE

■ English
☐ Deutsch
☐ Français
☐ Italiano
☐ Español
☐ Nederlands
☐ Português
☐ Suomi
☐ Svenska
☐ Ελληνικό
☐ Türkçe

Select

Select ▽ △ and press OK

Fig. 1

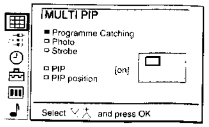
❷ Display the Menu

Press the MENU button twice.
The main menu appears. (See Fig. 2)

Using △+ or ▽– select the symbol 🧰 and press OK.
Now, choose one of the methods described overleaf:
»Preset Channels Automatically«

or

»Preset Channels Manually«.



MULTI PIP

■ Programme Catching
☐ Photo
☐ Strobe

☐ PIP {on}
☐ PIP position

Select ▽ △ and press OK

Fig. 2

With this method, you can preset all receivable channels at once.

To stop automatic channel presetting:
Press ⬅ on the Remote Commander.

Notes:
- After presetting the channels automatically, you can check which channels are stored on which programme positions. For details, see »Displaying the Programme Table« on page 46.
- You can sort the programme positions to have them appear on screen in the order you like. For details, see »Sorting Programme Positions« on page 41.

Programme names are automatically taken from Teletext if available. If not, please refer to page 43 »Captioning a Station name« for more information.

❸ Preset channels automatically

1 Select the symbol 🧰 for »Preset« with △+ or ▽– and press OK.
The PRESET menu appears. (See Fig. 3.)

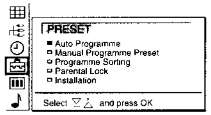
2 Select »Auto Programme« with △+ or ▽– and press OK.
The AUTO PROGRAMME menu appears. (See Fig. 4.)

3 Press OK.
Select if necessary the TV broadcast system (B/G for Western European or D/K for Eastern European countries) with △+ or ▽– and press OK. The first element of the »PROG« number will be highlighted.

4 Select the programme (number button) from which you want to start presetting. Select the first element of the double-digit number with △+ or ▽– or the number buttons (e.g. For »04«, select »0« here) and press OK.
The second element of »PROG« will be highlighted.

5 Select the second element of the double-digit number with △+ or ▽– or the number buttons (e.g. For »04«, select »4« here) (See Fig. 5.) and press OK.

6 Select »C« or »S« with △+ or ▽– and press OK.
The automatic channel presetting starts.
When presetting is finished, the preset menu reappears. All available channels are now stored on successive number buttons. Press MENU to restore normal TV picture.

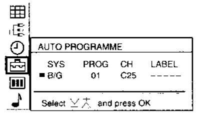


PRESET

■ Auto Programme
☐ Manual Programme Preset
☐ Programme Sorting
☐ Parental Lock
☐ Installation

Select ▽ △ and press OK

Fig. 3

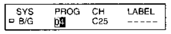


AUTO PROGRAMME

	SYS	PROG	CH	LABEL
■	B/G	01	C25	-----

Select ▽ △ and press OK

Fig. 4



	SYS	PROG	CH	LABEL
☐	B/G	04	C25	-----

Fig. 5

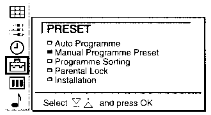
Use this method if there are only a few channels in your area to preset or if you want to preset channels one by one. You may also allocate programme numbers to various video input sources.

If you have made a mistake:
Press ⬅ to go back to the previous position.
To go back to main menu
Keep pressing ⬅.
To go back to the normal TV picture:
Press MENU.

❸ Preset channels manually

1 Select the symbol 🧰 for »Preset« with △+ or ▽– and press OK.
The PRESET menu appears. (See Fig. 6.)

2 Select »Manual Programme Preset« with △+ or ▽– and press OK.
The MANUAL PROGRAMME PRESET menu appears. (See Fig. 7.)

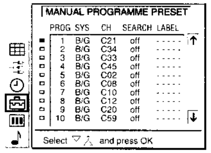


PRESET

☐ Auto Programme
■ Manual Programme Preset
☐ Programme Sorting
☐ Parental Lock
☐ Installation

Select ▽ △ and press OK

Fig. 6



MANUAL PROGRAMME PRESET

	PROG	SYS	CH	SEARCH	LABEL
■	1	B/G	C21	off	-----
☐	2	B/G	C34	off	-----
☐	3	B/G	C33	off	-----
☐	4	B/G	C45	off	-----
☐	5	B/G	C02	off	-----
☐	6	B/G	C08	off	-----
☐	7	B/G	C10	off	-----
☐	8	B/G	C12	off	-----
☐	9	B/G	C20	off	-----
☐	10	B/G	C59	off	-----

Select ▽ △ and press OK

Fig. 7

To tune in a channel by frequency:
After selecting F in step 6, enter three digits using the number buttons.
Press OK.

3 Using Δ+ or ∇–, select the programme position (number button) to which you want to preset a channel, and press OK.

4 Select, if necessary the TV broadcast system or a video input source (EXT) with Δ+ or ∇–.

5 Then press OK. The CH position wil be highlighted. (See Fig. 8.)

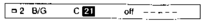

▭2 B/G C 21 off -----

Fig. 8

6 Using Δ+ or ∇–, select C (to preset a regular channel), S (cable channel) or F (to tune in by frequency) and press OK.
The first element of the »CH« number will be highlighted.
If you have selected EXT in step 5, select the video input source with Δ+ or ∇–. (See Fig. 9.)

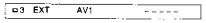

▭3 EXT AV1 -----

Fig. 9

There are two ways to preset channels. If you know the channel number, go to step »7-Manual«,

or

if you don't know the channel number, go to step »7- Search«.

7 ***Manual***

-a Select the first element of the »CH« number with Δ+ or ∇– or the number buttons and press OK.
The second element of the »CH« number will be highlighted.

-b Select the second element of the number with Δ+ or ∇– or the number buttons.
The selected number appears. (See Fig. 10.)

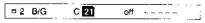

▭2 B/G C 21 off -----

Fig. 10

-c Press OK
The »SEARCH« position is highlighted and the selected channel is now stored. (See Fig. 11.)

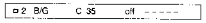

▭2 B/G C 35 off -----

Fig. 11

-d Press OK until the cursor appears by the next programme position.

-e Repeat steps 3 to 7 to preset other channels.

If you have made a mistake:
Press ⬅ to go back to the previous position.
To go back to main menu:
Keep pressing ⬅.
To go back to the normal TV picture:
Press MENU.

7 ***Search***

-a Press OK repeatedly until the colour of the SEARCH position changes.

-b Start searching for the channel with Δ+ (up) or ∇– (down).
The CH position changes colour. (See Fig. 12.)
The CH number starts counting up or downwards. When a channel is found, it stops. (See Fig. 13.)

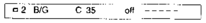

▭2 B/G C 35 off -----

Fig. 12

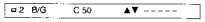

▭2 B/G C 50 ▲▼ -----

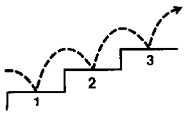
Fig. 13

-c Press OK if you want to store this channel. If not, press Δ+ or ∇– to continue channel searching.

-d Press OK until the cursor appears by the next programme position.

-e Repeat steps 3 to 7 to preset other channels.

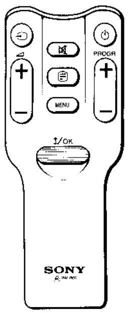
Additional Presetting Functions



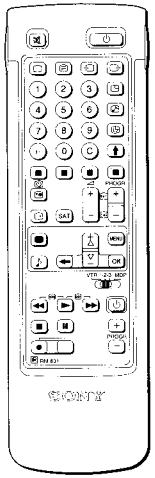
This section shows you additional presetting functions such as sorting or skipping programme positions, captioning a station name, manual fine-tuning, and using the parental lock.

Before you begin

- Check that the Full Function side of the Remote Commander is visible
- Locate the Menu operation buttons.



PROGRAMME SORTING



Sorting Programme Positions

With this function, you can sort the programme positions to a preferable order.

1 Press MENU to display the main menu.

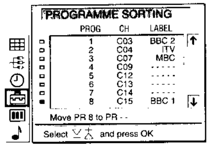
2 Select the symbol 🧰 for »Preset« with Δ+ or ∇– and press OK.
The PRESET menu appears.

3 Select »Programme Sorting« with Δ+ or ∇– and press OK.
The PROGRAMME SORTING menu appears. (See Fig. 14.)

4 Using Δ+ or ∇– select the programme position which you want to move to another and press OK.
The colour of the selected position changes. (See Fig. 15.)

5 Using Δ+ or ∇– select the programme position to which you want to move the channel of the programme position selected in step 4 and press OK. Now the programme positions have been sorted. (See Fig. 16.)

6 Repeat steps 4 and 5 to sort other programme positions.


PROGRAMME SORTING

	PROG	CH	LABEL
▫	1	C03	BBC 2
▫	2	C04	ITV
▫	3	C07	MBC
▫	4	C09	------
▫	5	C12	------
▫	6	C13	------
▫	7	C14	------
■	8	C15	BBC 1

Move PR 8 to PR - -

Select ∇ Δ and press OK

Fig. 14

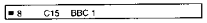
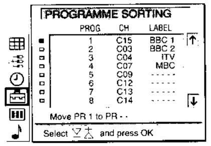

■ 8 C15 BBC 1

Fig. 15


PROGRAMME SORTING

	PROG	CH	LABEL
■	1	C15	BBC 1
▫	2	C03	BBC 2
▫	3	C04	ITV
▫	4	C07	MBC
▫	5	C09	-----
▫	6	C12	-----
▫	7	C13	-----
▫	8	C14	-----

Move PR 1 to PR - -

Select ∇ Δ and press OK

Fig. 16

INSTALLATION

For higher programme positions:
The display scrolls automatically.
If you have made a mistake:
Press ⬅ to go back to the previous position.
To go back to main menu:
Keep pressing ⬅.
To go back to the normal TV picture:
Press MENU.

How to adjust the Picture Rotation

If due to the earth magnetism the picture »slants«, you can use the function »Picture Rotation« to readjust the picture.

1 Press MENU to display the main menu.

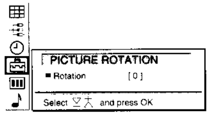
2 Select the symbol 🧰 for »Preset« with Δ+ or ∇– and press OK.
The PRESET menu appears.

3 Select »Installation« with Δ+ or ∇– and press OK.
The INSTALLATION menu appears.

4 Select »Picture Rotation« with Δ+ or ∇– and press OK.
The PICTURE ROTATION menu appears. (See Fig. 17.)

5 Press OK. Adjust the picture rotation with Δ+ or ∇– until you have an upright picture. As you press the cursor buttons, the range changes from – 4 to + 4.

6 Press OK to store the adjustment.


PICTURE ROTATION

■ Rotation [0]

Select ∇ Δ and press OK

Fig. 17

INSTALLATION

Using »Further Programme Preset«

Using the menu »Further Programme Preset« you can

a) individually adjust and store the volume level of each channel (Volume offset).

b) in case of a strong sound signal (distorted sound), attenuate the sound signal for each programme position.

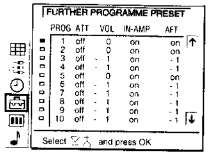
c) use the manual fine tuning to obtain a better picture reception, if the picture is distorted. Normally the AFT (automatic fine tuning) is operating.

1 Press MENU to display the main menu.

2 Select the symbol 🧰 for »Preset« with △+ or ▽– and press OK. The PRESET menu appears.

3 Select »Installation« with △+ or ▽– and press OK. The INSTALLATION menu appears.

4 Select »Further Programme Preset« with △+ or ▽– and press OK. The FURTHER PROGRAMME PRESET menu appears (See Fig. 18).



FURTHER PROGRAMME PRESET

	PROG	ATT	VOL	IN-AMP	AFT
■	1	off	0	on	on
□	2	off	0	on	on
□	3	off	-1	on	-1
□	4	off	-1	on	-1
□	5	off	0	on	on
□	6	off	-1	on	-1
□	7	off	-1	on	-1
□	8	off	-1	on	-1
□	9	off	-1	on	-1
□	10	off	-1	on	-1

Select ▽ △ and press OK

Fig. 18

5 Using △+ or ▽– select the desired programme position and press OK once to select a) VOL (Volume offset), twice to select b) » IN-AMP« (Input Amplifier) or three times to select c) AFT (Automatic Fine Tuning). The selected item changes colour.

To adjust or change:

a) **Volume offset (VOL)**
Using △+ or ▽– you can adjust the volume level for the selected programme position within a range from –7 to +7. Press OK to store the volume level.
Repeat step 5 to set the volume level for other programme positions.

b) **IN-AMP (input amplifier)**
Using △+ or ▽– select »Off« for the selected programme position. Press OK to confirm the selection. Repeat step 5 to switch off the input amplifier for other programme positions.

c) **AFT**
Using △+ or ▽– you can fine-tune the channel within a range from –15 to +15. Press OK to store the fine-tuned level. Repeat step 5 to fine-tune the other channels.

To reactivate AFT (Automatic Fine Tuning)
Repeat from the beginning and select »ON« in step 5.

6 Press MENU to return to the normal TV mode.

MANUAL PROGRAMME PRESET

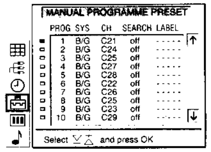
Skipping Programme Positions

You can skip unused programme positions when selecting programmes with the PROGR +/– buttons. However, the skipped programmes may still be called up when you use the number buttons.

1 Press MENU to display the main menu.

2 Select the symbol 🧰 for »Preset« with △+ or ▽– and press OK. The PRESET menu appears.

3 Select »Manual Programme Preset« with △+ or ▽– and press OK.
The MANUAL PROGRAMME PRESET menu appears. (See Fig.19.)



MANUAL PROGRAMME PRESET

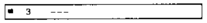
	PROG	SYS	CH	SEARCH	LABEL
■	1	B/G	C21	off	-----
□	2	B/G	C24	off	-----
□	3	B/G	C25	off	-----
□	4	B/G	C27	off	-----
□	5	B/G	C28	off	-----
□	6	B/G	C22	off	-----
□	7	B/G	C26	off	-----
□	8	B/G	C25	off	-----
□	9	B/G	C23	off	-----
□	10	B/G	C29	off	-----

Select ▽ △ and press OK

Fig. 19

4 Using △+ or ▽–, select the programme position which you want to skip and press OK.
The »SYS« position changes colour.

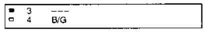
5 Press △+ or ▽– until »– – –« appears in the SYSTEM position. (See Fig. 20.)



■ 3 ---

Fig. 20

6 Press OK. (See Fig. 21.)
When you select programmes using the PROGR +/– buttons, the programme position will be skipped.



■ 3 ---
□ 4 B/G

Fig. 21

7 Repeat steps 4 to 6 to skip other programme positions.

MANUAL PROGRAMME PRESET

Captioning a Station Name

Programme names are usually automatically taken from Teletext if available. You can also »name« a channel or an input video source using up to five characters (letters or numbers) to be displayed on the TV screen (e.g. BBC1). Using this function, you can easily identify which channel or video source you are watching.

If you have made a mistake:
Press ← to go back to the previous position.

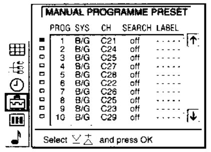
To go back to main menu:
Keep pressing ←.

To go back to the normal TV picture:
Press MENU.

1 Press MENU to display the main menu.

2 Select the symbol 🧰 for »Preset« with △+ or ▽– and press OK. The PRESET menu appears.

3 Select »Manual Programme Preset« with △+ or ▽– and press OK.
The MANUAL PROGRAMME PRESET menu appears. (See Fig. 22.)



MANUAL PROGRAMME PRESET

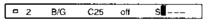
	PROG	SYS	CH	SEARCH	LABEL
■	1	B/G	C21	off	-----
□	2	B/G	C24	off	-----
□	3	B/G	C25	off	-----
□	4	B/G	C27	off	-----
□	5	B/G	C28	off	-----
□	6	B/G	C22	off	-----
□	7	B/G	C26	off	-----
□	8	B/G	C25	off	-----
□	9	B/G	C23	off	-----
□	10	B/G	C29	off	-----

Select ▽ △ and press OK

Fig. 22

4 Using △+ or ▽–, select the programme position you want to caption and press OK repeatedly until the first element of the LABEL position is highlighted.

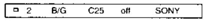
5 Select a letter or number with △+ or ▽– and press OK.
The next element will be highlighted.
Select other characters in the same way. If you want to leave an element blank, select – and press OK. (See Fig. 23.)



□ 2 B/G C25 off S▮---

Fig. 23

6 After selecting all the characters, press OK repeatedly until the cursor appears by the next programme position (at the left margin). Now the caption you chose is stored. (See Fig. 24.)



□ 2 B/G C25 off SONY

Fig. 24

7 Repeat steps 5 and 6 to caption names for other channels.

PARENTAL LOCK

Parental Lock

You can prevent undesirable broadcasts from appearing on the screen. We suggest you use this function to prevent children from watching programmes which you consider unsuitable.

1 Press MENU to display the main menu.

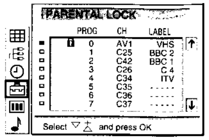
2 Select the symbol ▣ for »Preset« with △+ or ▽– and press OK.
The PRESET menu appears.

3 Select »Parental Lock« with △+ or ▽– and press OK.
The PARENTAL LOCK menu appears. (See Fig. 25.)

4 Using △+ or ▽–, select the programme position you want to block and press OK.
The symbol 🔒 appears in front of the programme number indicating that this programme is now blocked. (See Fig. 26.)

5 Repeat step 4 to block other programme positions.

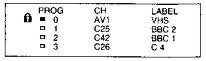
If you try to select a programme that has been blocked:
The message »LOCKED« appears on the blank TV screen.


PARENTAL LOCK

		PROG	CH	LABEL
■	🔒	0	AV1	VHS
▫		1	C25	BBC 2
▫		2	C42	BBC 1
▫		3	C26	C 4
▫		4	C34	ITV
▫		5	C35	-----
▫		6	C36	-----
▫		7	C37	-----

Select ▽ △ and press OK

Fig. 25



		PROG	CH	LABEL
🔒	■	0	AV1	VHS
	▫	1	C25	BBC 2
	▫	2	C42	BBC 1
	▫	3	C26	C 4

Fig. 26

Cancelling blocking

1 On the PARENTAL LOCK menu, select the programme position you want to unblock with △+ or ▽–.

2 Press OK.
The symbol 🔒 disappears indicating that the blocking has been cancelled.

Tuning in a Channel Temporarily

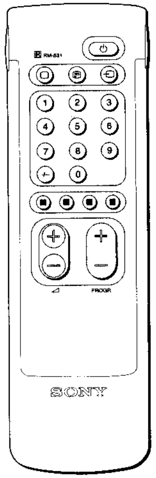
You can tune in a channel temporarily, even when it has not been preset. Use the buttons on the Full-Function side of the Remote Commander.

1 Press C on the Remote Commander. For cable channels, press C twice.
The indication »C« (»S« for cable channels) appears on the screen.

2 Enter the double-digit channel number using the number buttons (e.g. for channel 4, first press 0, then 4).
The channel appears.
However, the channel will not be stored.

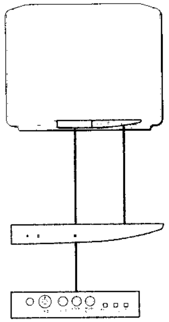
Operating Instructions

Watching the TV



If no picture appears when you depress ⏽ on the TV
and if the standby indicator on the TV is lit, the TV is in standby mode. Press ▢ or one of the number buttons to switch it on.

This section explains the basic functions you use while watching TV. Most of the operations can be done using the simple side of the Remote Commander.



Switching the TV on and off

Switching on

Depress ⏽ on the TV.

Switching off temporarily

Press ⏻ on the Remote Commander.
The TV enters standby mode and the standby indicator on the front of the TV lights up.

To switch on again
Press ▢, PROGR +/–, or one of the number buttons on the Remote Commander.

Switching off completely

Depress ⏽ on the TV.

Selecting TV Programmes

Press PROGR +/– or the number buttons.

To select a double-digit number

Press -/--, then the number.
For example, if you want to choose 23, press -/--, 2 and 3.

Adjusting the Volume

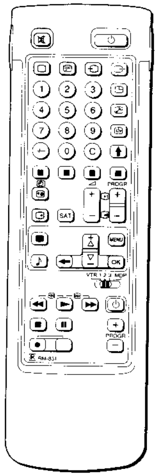
Press ⊿+/–.

Operating the TV Using the Buttons on the TV

- With the buttons on the TV, you can select programmes, adjust the volume, and select video input sources.
Press P → ⊿ → ⊕ button repeatedly until the programme number, ⊿ (for volume), or ⊕ (for video input picture) appears.Then adjust with the –/+ buttons.
- Press –/+ buttons to switch on the TV from the standby mode.
- Press –/+ simultaneously to reset picture and sound controls to the factory preset level (RESET function).

For details of the teletext operation, refer to page 53.

For details of the video input picture, refer to page 56.



Watching Teletext or Video Input

Watching teletext

- Press ⊜ to view the teletext.
- Press three number buttons to select a page.
- Press one of the coloured buttons for fastext operation.
- Press ⊕ (PAGE +) or ⊖ (PAGE –) for the next or preceeding page.
- To go back to the normal TV picture, press ▢.

Watching a video input picture

Press ⇥ repeatedly until the desired video input appears. To go back to the normal TV picture, press ▢.

More Convenient Functions

Use the Full-Function side of the Remote Commander.

Displaying the on screen indications

- Press ⊕ once to display all the indications. They will disappear after some seconds.
- Press ⊕ twice to have the programme number and label stay on screen. Press twice again to make indications disappear.

Muting the sound.

Press 🔇.
To resume normal sound, press 🔇 again.

Displaying the time

Press ⊜. This function is available only when teletext is broadcast.
To make the time display disappear, press ⊜ again.

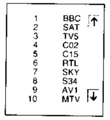
Displaying the Programme Table

Press OK. A Programme Table will be displayed on the right side of the TV screen (See Fig.27).

Selecting TV programmes

Press PROGR +/– or select the desired programme position using Δ+ or ∇– and press OK.

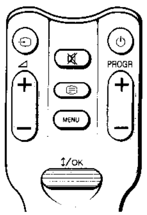
To make the Programme Table disappear, press MENU.



1 BBC ↑
2 SAT
3 TV5
4 C02
5 C15
6 RTL
7 SKY
8 S34
9 AV1
10 MTV ↓

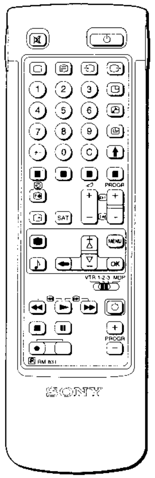
Fig. 27

Adjusting and Setting the TV Using the Menu



PICTURE CONTROL

SOUND CONTROL



If you have made a mistake:
Press ⬅ to go back to the previous position.
To go back to the main menu:
Keep pressing ⬅.
To go back to the normal TV picture:
Press MENU.

- Hall Surround and Dolby Pro Logic are not available via headphones.

Note on LINE OUT:
The audio level and the dual sound mode output from the ⊖ jack on the rear correspond to the HEADPHONES VOLUME and DUAL SOUND settings.

When watching a video input source with stereo sound:
You can select DUAL SOUND to change the sound.

For setting the balance:
See page 49 »Level settings of left and right speaker.

Adjusting the Picture and Sound

Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste. In addition, you can reduce the picture noise. You can also select dual sound (bilingual) programmes when available, adjust the sound for listening with the headphones (∩). Also you have the possibility to adjust the sound to your individual taste using the Graphic Equalizer and special Sound effects.

1 Press ● (for picture) or ♪ (for sound) on the Remote Commander.

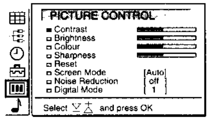
or

Press MENU and select on the screen the symbol ▥ for Picture Control or ♪ Sound Control, then press OK.
The PICTURE CONTROL or SOUND CONTROL menu appears. (See Fig. 28 or Fig. 29)

2 Using Δ+ or ∇–, select the item you want to adjust and press OK.The selected item changes colour. (See Fig. 30)

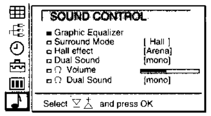
3 Adjust the setting with Δ+ or ∇ – and press OK.
The cursor appears beside the next item (at the left margin). (See Fig. 31)
For the effect of each control, see the table below.

4 Repeat steps 2 and 3 to adjust other items.



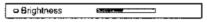
PICTURE CONTROL
■ Contrast
▫ Brightness
▫ Colour
▫ Sharpness
▫ Reset
▫ Screen Mode [Auto]
▫ Noise Reduction [off]
▫ Digital Mode [1]
Select ∇ Δ and press OK

Fig. 28



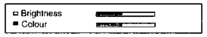
SOUND CONTROL
■ Graphic Equalizer
▫ Surround Mode [Hall]
▫ Hall effect [Arena]
▫ Dual Sound [mono]
▫ ∩ Volume
▫ ∩ Dual Sound [mono]
Select ∇ Δ and press OK

Fig. 29



▫ Brightness

Fig. 30



▫ Brightness
■ Colour

Fig. 31

Effect of each control

PICTURE CONTROL	Effect	
Contrast	Less ——I—— More	
Brightness	Darker ——I—— Brighter	
Colour	Less ——I—— More	
Hue (only for NTSC)	Greenish ——I—— Reddish	
Sharpness	Softer ——I—— Sharper	
Reset	Resets picture to the factory preset levels.	
Screen Mode	Auto (automatic selection of 16:9 broadcasts decoded in 4:3) → 4:3 Normal → 16:9 Wide screen effect	
Noise Reduction	Off: Normal	on: Reduction of picture noise in case of weak signals
Digital Mode	I: Normal	II: LFR (Line Flicker Reduction) off

SOUND CONTROL	Effect
Graphic Equalizer	(See page 49 for more information)
Surround Mode	Off: Normal → Dolby → Hall
Hall Effect (only if »Hall« is on)	Choice between different hall effects Room → Dome → Arena
Dual Sound	A : left channel B : right channel Stereo Mono The selected mode of the A-◯-B indicator on the TV lights up.
Headphones:	
∩ Volume	Less —I— More
∩ Dual Sound	A: channel 1 → B: channel 2 → PIP (if PIP is switched on you can select the PIP sound for the headphones) → Stereo → Mono

Dolby Pro Logic Set Up

With Dolby Pro Logic Surround you can experience »three dimensional« sound when receiving Dolby Surround encoded programmes.
This menu enables you to adapt the Dolby Pro Logic Surround features to your individual requirements.

Adjusting the sound level of the speakers

Dolby Pro Logic uses 4 sound channels to supply 5 speakers:
Left and right: Left and right TV speakers
Centre: Centre speaker for dialogues
Surround: Surround speakers for surround sound effect
Using »Level Settings« a noise generator enables you to adjust the sound levels of the speakers to your individual listening-position. From your listening position all sound levels should be the same.

Notes:
- Make sure to connect your own or the supplied speakers to the set. (See page 36).
- Select »On« for Dolby Pro Logic when receiving Dolby Surround encoded programmes.
- This adjustment is necessary only once when you install the TV and the speakers or change their positions.

1 Press MENU, select the symbol 🧰 on the screen for »Preset« and press OK. Then select »Installation« and »Dolby Pro Logic Set Up« using △+ or ▽− and press OK.
The Dolby ProLogic SET UP menu appears (See Fig. 32).

2 Press OK. The cursor moves to Left (sound level of the left speaker) (See Fig. 33) and you hear a test tone from the left speaker.

3
a) To change the level:
Press OK and adjust the highlighted bar by pressing △+ or ▽− repeatedly. Press OK to confirm the adjustment.
or
b) To go on the next bar:
Press △+ or ▽− to select Centre, Right or Surround. Adjust using step 3a).

4 Repeat steps 3a and b to adjust all sound levels.

5 Press ⬅ to exit »Level Settings« and Menu to return to the normal TV screen.

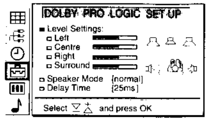

DOLBY PRO LOGIC SET UP
■ Level Settings:
□ Left
□ Centre
□ Right
□ Surround
□ Speaker Mode [normal]
□ Delay Time [25ms]
Select ▽ △ and press OK

Fig. 32

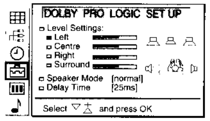

DOLBY PRO LOGIC SET UP
□ Level Settings:
■ Left
□ Centre
□ Right
□ Surround
□ Speaker Mode [normal]
□ Delay Time [25ms]
Select ▽ △ and press OK

Fig. 33

Setting Speaker Mode and Delay Time

1 Select »Dolby ProLogic Set Up« in the »Installation« menu using △+ or ▽− and press OK.

2 Press ▽− to select »Speaker Mode« and press OK.
Using △+ or ▽− select
Normal: if all speakers are activated
Phantom: if the centre speaker is not activated
3 stereo: if the surround speakers are not activated
Press OK to confirm your selection.

3 Press ▽− to select »Delay Time« and press OK. You can select a time delay for the sound of the surround speakers which depends on your room size (e.g. 20ms for standard rooms, 30 ms for small rooms)
15 ms → 20 ms → 25 ms → 30 ms
Press OK to confirm your selection.

4 Press MENU to return to the normal TV screen.

Note: The modifications made in »USER« mode will be stored. All other settings are reset to factory-set level when you change to another mode.

Graphic Equalizer

Using this function you can individually adjust the sound by cutting and boosting selected frequencies. You can also select between the following modes:
Flat → Pop → Rock → Jazz → Vocal → User

1 Select »Sound Control« in the main menu, then select »Graphic Equalizer« using △+ or ▽− and press OK.
The GRAPHIC EQUALIZER menu appears (See Fig. 34).

2 Press OK. The colour of »Mode« changes. Select the desired mode with △+ or ▽− and press OK.

3 If you want to modify a mode, select the desired bar of a frequency band using △+ or ▽− and press OK. The selected frequency changes colour. Using △+ or ▽− adjust the level of frequency and press OK. In this way you can adjust all 5 graphic bars.

4 Press MENU to return to the normal TV mode.

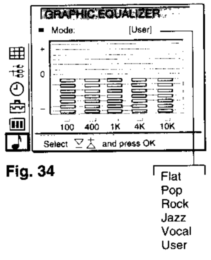

GRAPHIC EQUALIZER
■ Mode: [User]
Select ▽ △ and press OK

Fig. 34

Preset Dolby Pro Logic

To enjoy programmes encoded in Dolby Surround sound, switch on »Dolby Pro Logic« in the sound menu.

1 Press ♪ on the Remote Commander.
The SOUND CONTROL menu appears.

2 Using △+ or ▽− select »Surround Mode« and press OK.

3 Using △+ or ▽− select »Dolby« and press OK.
After the end of the broadcast make sure to return the setting to »OFF«.

TIMER

To switch off the timer:
Select »OFF« in step 3.

To check the remaining time:
Press ⊕.

To go back to the normal TV picture:
Press MENU.

Using the Sleep Timer

You can select a time period after which the TV automatically switches into standby mode.

1 Using △+ or ▽− select the symbol 🕘 for »Timer« and press OK. The TIMER menu appears (see Fig. 35).

2 Press OK.
The time period option changes colour.

3 Select the time period with △+ or ▽−.
The time period (in minutes) changes as follows:
10→20→30→40→50→60→70→80→90

4 After selecting the time period, press OK.
The cursor moves back to the left margin and the timer starts counting.
One minute before the TV switches into standby mode, a message is displayed on the screen.

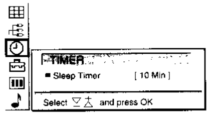
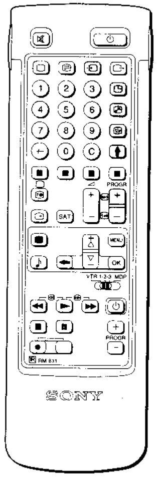

TIMER
■ Sleep Timer [10 Min]
Select ▽ △ and press OK

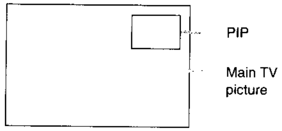
Fig. 35

PIP (Picture in Picture)



Notes:
- RGB input source cannot be displayed in PIP.

With this function you can display a »PIP screen« (small picture) within the main TV picture. In this way you can watch or monitor the video output from any connected equipment (for example from a VTR) while watching TV or vice versa. For information about connection of other equipment, refer to page 55.



Switching PIP on and off

Press ◘.
The PIP screen will be displayed. The PIP picture will come from the source chosen when the TV was last used.

To switch PIP off
Press ◘ again.

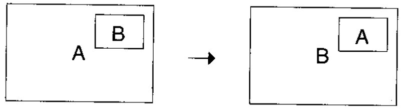
Selecting a PIP source

Press ↑.
The symbol ↑ will be displayed at the bottom, left-hand corner of the screen.
Press ⊕ repeatedly until the desired source is indicated (e.g. TV, AV1, AV2, YC2, AV3, YC3, AV4, YC4).

Note
If no video source has been connected, the PIP picture will be noisy.

Swapping screens

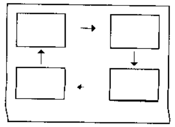
Press ◙.
The main screen will switch the picture with the PIP screen.

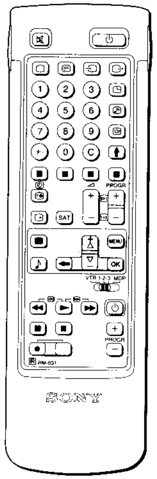


Note
If a TV programme is on the PIP screen and a video source on the main picture, and you want to change channels, first press ↑ and then the programme buttons or PROGR +/–.

Changing the position of the PIP

Press ◙ repeatedly to change the position of the PIP screen within the main screen. There are four different positions available.





Operating Multi PIP using the Menu

Using the »Multi PIP« Menu you have the possibility to operate the PIP mode, scan 9 successive TV channels on the screen (Programme Catching), display 8 successive freeze pictures (Photo mode) or reproduce the main picture image by image (strobe function).

1 Press MENU to display the main menu.

2 Select the symbol ⊞ for »MULTI PIP« with Δ+ or ∇– and press OK. The MULTI PIP menu appears (See Fig. 36).

a) **Programme Catching**
Using Δ+ or ∇– select »Programme Catching« and press OK. Now a scan of 9 successive programmes (8 still pictures, 1 live picture where the cursor is positioned) is displayed on the TV screen starting from the programme tuned in. Using Δ+ or ∇– you can move the cursor and update the still pictures. The programme scanning starts again if you select the programme position lower or higher than the 9 displayed ones (See Fig. 37).

To select a Programme using Programme Catching
Using Δ+ or ∇– select the desired programme position and press OK. Now the selected programme is displayed and you are back in the normal TV mode.

b) **Photo Mode**
Using Δ+ or ∇– select »Photo« and press OK. Now the main picture is displayed as a succession of 8 still pictures and a 9th picture which will be live (See Fig. 38). Using Δ+ or ∇– the photo mode starts again. Press OK to return to the normal TV mode.

c) **Strobe mode**
Using Δ+ or ∇– select »Strobe« and press OK. Now the TV picture is displayed image by image, which gives it the effect of slow motion (See Fig. 39). Using Δ+ or ∇– select the speed of the motion (3 different speeds are available). Press OK to return to the normal TV mode.

d) **Switching PIP on and off**
Using Δ+ or ∇– select »PIP« and press OK. Using Δ+ or ∇– select »ON« to display the PIP screen and »OFF« to switch it off and press OK.

e) **Changing the position of the PIP**
Using Δ+ or ∇– select »PIP position« and press OK. Using Δ+ or ∇– repeatedly to change the position of the PIP screen and press OK.

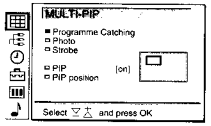


Fig. 36

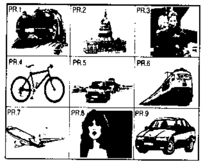


Fig. 37

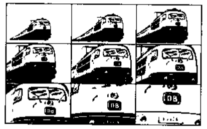


Fig. 38

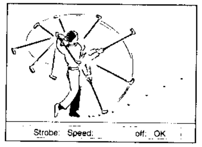
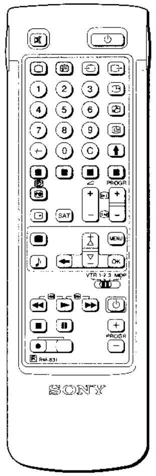


Fig. 39

Teletext



Notes:
- Teletext errors may occur if the broadcasting signals are weak.

TV stations broadcast an information service called Teletext via the TV channels. Teletext service allows you to receive various information pages such as weather reports or news at any time you want. For advanced teletext operation, use the buttons on the Full-Function side of the Remote Commander.

Direct Access Functions

Switching Teletext on and off

1 Select the TV channel which carries the teletext broadcast you want to watch.

2 Press ⊜ to switch on teletext.
A teletext page will be displayed (usually the index page):If there is no teletext broadcast, »No text available« is displayed on the information line at the top of the screen.

To switch teletext off
Press ○.

Selecting a teletext page

With direct page selection
Use the number buttons to input the three digits of the chosen page number.
If you have made a mistake, type in any three digits. Then re-enter the correct page number.

With page-catching

1 Select a teletext page with a page overview (e.g. index page).

2 Press OK. Using △+ or ▽–, select the desired page. »Page Catching« will be displayed on the information line. Press OK. The requested page will appear in a few seconds.

Press ⊜ to resume normal teletext reception.

Accessing the next or preceding page
Press ⊞ (PAGE +) or ⊟ (PAGE –).
The next or preceding page appears.

Superimposing the teletext display on the TV programme

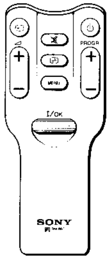
- Press ⊜ once in teletext mode or twice in TV mode.
- Press ⊜ again to resume normal teletext reception.

Preventing a teletext page from being updated

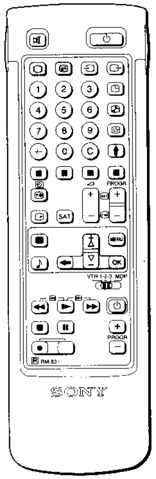
- Press ⊕ (HOLD). The HOLD symbol »⊕« is displayed on the information line.
- Press ⊜ to resume normal teletext reception.

Using Fastext

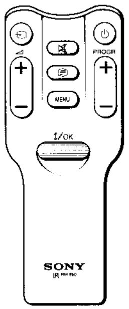
With Fastext you can access pages with one key stroke.When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons on the Remote Commander.
Press the corresponding coloured button on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed after some seconds.



Note:
Fastext operation is only possible, if the TV station broadcasts Fastext signals.



Note:
Some of the features may not be available depending on the Teletext service.



To cancel the request:
Select »OFF« for the TIME PAGE setting.

Using the Teletext Menu

This TV is provided with a menu-guided teletext system. When teletext is switched on, you can use the menu buttons to operate the teletext menu. Select the teletext menu functions in the following way:

1 Press MENU. The menu will be superimposed on the teletext display. (See Fig. 40)

2 Using △+ or ▽–, select the teletext function you want and press OK. (See Fig. 41)

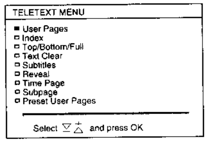


Fig. 40

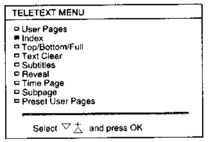


Fig. 41

USER PAGES/PRESET USER PAGES

See page 54 for information about presetting and operating the user pages.

INDEX

The index will give you an overview of the contents of the teletext and the page numbers.

TOP/BOTTOM/FULL

For convenient reading of a teletext page, you can enlarge the teletext display with the ability to scroll up and down the screen. After having selected the function, an information line Top/Bottom/Full will be displayed. (See Fig. 42).
Press △+ for »Top« to enlarge the upper half. For »Bottom« keep pressing ▽–, to enlarge the lower half. Press OK for »Full« to resume the normal size.
Press ⊜ to resume normal teletext reception.

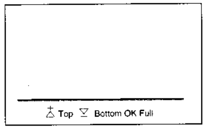


Fig. 42

TEXT CLEAR

After having selected the function, you can watch a TV programme while waiting for a requested teletext page to be captured (The symbol changes colour) (See Fig. 43).
Press ⊜ to view the requested page.

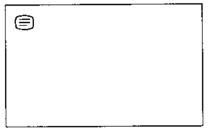


Fig. 43

SUBTITLES

Your teletext service will inform you if a TV programme is subtitled. After having selected the function the subtitles will be displayed.

REVEAL

Sometimes pages contain concealed information, such as answers to a quiz. The reveal option lets you disclose the information. After having selected the function, an information line »REVEAL ON/OFF« will be displayed. (See Fig. 44).

Using △+ or ▽–, select ON to reveal the information or OFF to conceal it again.
Press ⊜ to resume normal teletext reception.

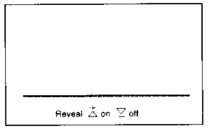


Fig. 44

TIME PAGE

Your teletext service will inform you, if a time coded page is available. You may have a page (e.g. an alarm page) displayed at a certain time.

1 Press OK. Using △+ or ▽– select ON and press OK.

2 To select the desired page, enter the three digits of the page number (e. g. 301) using the number buttons.

3 To select the time, enter four digits for the desired time (e.g. 1800) using the number buttons. Press MENU. The selected time is displayed at the top in the left-handed corner. At the requested time, the page will be displayed.
Press ⊜ to resume normal teletext mode.

To cancel the request:
Select »Subpage« and press OK.

SUBPAGE

You may want to select a particular teletext page from several subpages which are rotated automatically. After having selected the function, an information line will be displayed.

To select the desired subpage, enter four digits using PROGR+/– or the number buttons. (e.g. enter 0002 for the second page of a sequence).

User Page Bank System

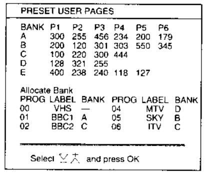
You can store up to 30 pages in the »Teletext page bank system«. In this way you have quick access to the pages you watch frequently.

Storing pages

There are 5 »banks« (A to E) for 5 teletext stations. In each bank you can store 6 preferred pages (P1 to P6).

If two broadcasting stations use the same Teletext:
You can preset one bank to 2 different programme positions.

1. Press ⊜ (if Teletext is not on already) and MENU to show the TELETEXT MENU display.
2. Select PRESET USER PAGES with △+ or ▽– and press OK.
3. Select the desired bank with △+ or ▽– and press OK. The cursor will go to the first position (P1) of the preferred pages.
4. Input the three digits of your first preferred page with the number buttons and press OK.
   The cursor will go to the second position.
5. Repeat step 4 for the other 5 page numbers you want to preset. If you do not want to preset all 6 page numbers available, press OK without inserting any number. After having finished the presetting press OK repeatedly until the cursor appears besides the next bank at the left margin.
6. Select Allocate Bank with △+ or ▽– and press OK.
7. Select the programme position for which you have preset pages with △+ or ▽– and press OK. (See Fig. 45)
8. Select the desired bank with △+ or ▽– (Banks A to E are available) and press OK.
9. Repeat steps 3 to 8 for the other 4 banks available.



PRESET USER PAGES

BANK	P1	P2	P3	P4	P5	P6
A	300	255	456	234	200	179
B	200	120	301	303	550	345
C	100	220	300	444		
D	128	321	255			
E	400	238	240	118	127	

Allocate Bank

PROG	LABEL	BANK	PROG	LABEL	BANK
00	VHS	—	04	MTV	D
01	BBC1	A	05	SKY	B
02	BBC2	C	06	ITV	C

Select ▽– △+ and press OK

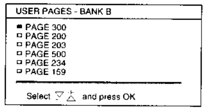
Fig. 45

Displaying User Pages

1. Select MENU.
2. Select User Pages with △+ or ▽– and press OK.
   A table of the stored preferred pages will be displayed. (See Fig. 46)
3. Select the desired page with △+ or ▽– and press OK. The page will be displayed after some seconds.

or

You can use the coloured buttons on the Remote Commander to have quick access to the first four User pages. Page 1 corresponds to the red button, P 2 to the green one, P 3 to the yellow one and P 4 to the blue button.
To select the desired page press the respective coloured button while you are in TV mode. Now the Page number of this teletext page will appear in white at the top in the left-handed corner of the TV screen. When the page number changes colour, the page is available. Press the coloured button again to display the page.



USER PAGES - BANK B

■ PAGE 300
□ PAGE 200
□ PAGE 203
□ PAGE 500
□ PAGE 234
□ PAGE 159

Select ▽– △+ and press OK

Fig. 46

Connecting and Operating Optional Equipment

Connecting Optional Equipment

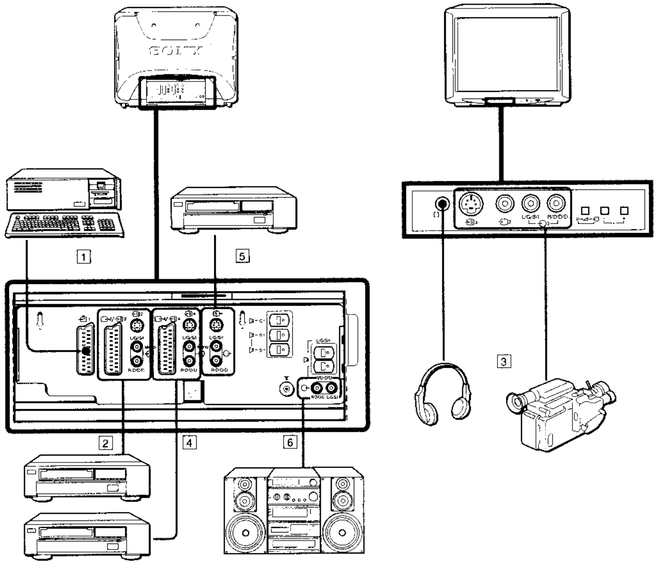
You can connect optional audio-video equipment to this TV such as VCRs, video disc players, and stereo systems.

To connect a VCR using the ╥ terminal
Connect the aerial output of the VCR to the aerial terminal ╥ of the TV.
We recommend that you tune in the signal to programme number »0«. For details see »Preset Channels Manually« on page 39.

If the picture or the sound is distorted
Move the VCR away from the TV.

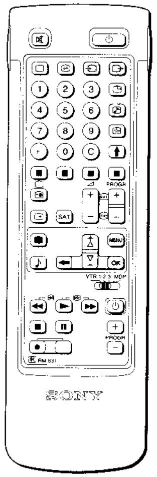
S video input (Y/C input)
Video signals may be separated into Y (luminance or brightness) and C (chrominance) signals. Separating the Y and C signals prevents them from interfering with one another, and therefore improves picture quality (especially luminance). This TV is equipped with 3 S Video input jacks through which these separated signals can be input directly.

When connecting a monaural VCR:
Connect only the white ⊸ jack to both the TV and VCR.



Acceptable input signal	Available output signal
1 Normal audio/video and RGB signal	Video/audio from TV tuner
2 Normal audio/video and S video signal	Video/audio from selected source
3 Normal audio/video and S video signal	No outputs
4 Normal audio/video and S video signal	Video/audio displayed on TV screen (monitor out)
5 No inputs	S video/audio signal displayed on TV screen (monitor out)
6 No inputs	Audio signal (variable)

Selecting input with PROGR +/– or number buttons:
You can preset video input sources to the programme positions so that you can select them with PROGR +/– or number buttons.
For details, see »Preset channels manually« on page 38.



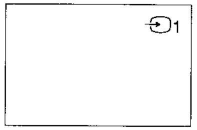
Selecting input and output

This section explains how to view the video input picture (of the video source connected to your TV), and how to select the output signal using direct access buttons or the menu system.

Selecting input

Press ⇥ repeatedly to select the input source.
The symbol of the selected input source will appear.

To go back to the normal TV picture
Press ○.



Input modes

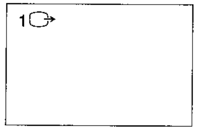
Symbol	Input signal
⇥ 1	Audio/video input through the ⇥1 connector
⇥	RGB input through the ⇥1 connector
⇥ 2	Audio/video input through the ⇄2/⇥Ⓢ2 connector
⇥Ⓢ 2	S video input through the ⇄2/⇥Ⓢ2 or ⇥Ⓢ2 connector
⇥ 3	Audio/video input through ⇥3 and ⇥3 connectors at the front
⇥Ⓢ 3	S video input through the ⇥Ⓢ3 connectors (4-pin connector) at the front
⇥ 4	Audio/video input through the ⇄4/⇥Ⓢ4 connector
⇥Ⓢ 4	S video input through the ⇄4/⇥Ⓢ4 or ⇥Ⓢ4 connector (4-pin connector)

You can also select the input mode using the P → ◺ → ⇥ and –/+ buttons on the TV.
In this case, select first ⇥ and then press the –/+ buttons to select the input.

Selecting the output

The ⇄2/⇥Ⓢ2 connector outputs the source input from the other connectors.

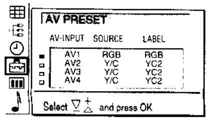
You can also select the input mode using the and buttons on the TV. In this case, select first and then press the buttons to select the input.



Symbol	⇄2/⇥Ⓢ2 connector outputs
1 ⇨	The audio/video signal from the ⇥1 connector
2 ⇨	The audio/video signal from the ⇄2/⇥Ⓢ2 connector
2 Ⓢ⇨	The audio/video signal from the ⇄2/⇥Ⓢ connector
3 ⇨	The audio/video signal from the ⇥3, ⇥3 connectors
3 Ⓢ⇨	The audio/video signal from the ⇥Ⓢ3, ⇥3 connectors
4 ⇨	The audio/video signal from the ⇄4/⇥Ⓢ4 connector
4 Ⓢ⇨	The audio/video signal from the ⇄4/⇥Ⓢ4 connector
TV ⇨	The audio/video signal from the ╥ aerial terminal

Using AV Preset

Using this function you can preset the desired input source (e.g. ⇥1, RGB signal) to the respective AV input (AV 1⇥).
In this way a connected VTR will automatically switch to the RGB signal.



AV PRESET

AV-INPUT	SOURCE	LABEL
AV1	RGB	RGB
AV2	Y/C	YC2
AV3	Y/C	YC2
AV4	Y/C	YC2

Select ▽ △ and press OK

Fig. 47

1 Select the symbol 🧰 for »Preset« with △+ or ▽– and press OK.

2 *Select first »Installation«, then »AV Preset« with △+ or ▽– and press OK.*
The AV PRESET menu appears (See Fig. 47).

3 Select the desired AV input with △+ or ▽– and press OK.

4 Select the desired source with △+ or ▽– and press OK.
For the respective AV inputs you have the following possibilies:

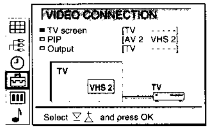
AV 1	RGB or AV	AV 3	YC3 or AV
AV 2	YC2 or AV	AV 4	YC or AV

5 If you want to name the AV input select »Label« using △+ or ▽– and press OK. Select a letter or a number with △+ or ▽– and press OK. The next element will be highlighted. Select other characters in the same way. If you want to leave an element blank, select – and press OK.
After having selected all the characters, press OK repeatedly until the cursor appears by the next AV input at the left margin.

6 Repeat steps 3 to 5 for the other AV inputs.

Checking and selecting the input and output sources using the menu

You can display the menu to see which input sources are selected for the TV screen and PIP screen, and which output source is selected. You can also select them on the menu display.



VIDEO CONNECTION

■ TV screen [TV - - - - -]
□ PIP [AV 2 VHS 2]
□ Output [TV - - - - -]

Select ▽ △ and press OK

Fig. 48

1 Select the symbol ⇶ for »Video Connection« with △+ or ▽– and press OK. The VIDEO CONNECTION menu appears.
(See Fig. 48)

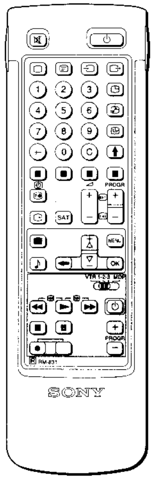
You can see which source is selected for the TV and PIP input, and for the output. If you want to select the input and output on this menu, go on to the next step.

2 Select TV Screen (input source for the TV screen), PIP(input source for the PIP screen), or output (output source) with △+ or ▽– and press OK. One of the source items changes colour.

3 Select the desired source with △+ or ▽–.
For details about each source, see the table on page 56.

4 Press OK.
The selected source is confirmed, and the cursor appears.

5 Repeat steps 2 to 4 to select the source for other inputs or outputs.



When recording
When you use the ● (record) button, make sure to press this button and the one to the right of it simultaneously.

Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control other Sony remote- controlled video equipment. The buttons for video operation have been factory-set to control most of Sony video equipment, such as: Beta, 8mm or VHS VCRs or video disc players.

Tuning the Remote Commander to the equipment

1 Set the VTR 1/2/3 MDP selector according to the equipment you want to control:

VTR 1: Beta VCR
VTR 2: 8mm VCR
VTR 3: VHS VCR
MDP: Video disc player

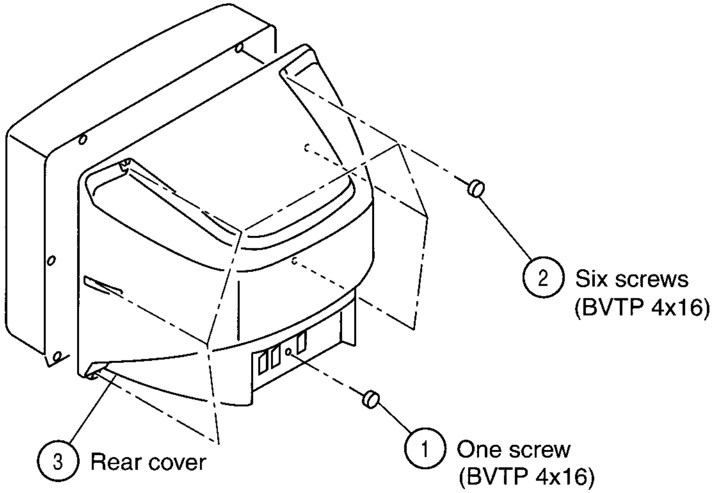
2 Use the buttons indicated in the illustration to operate the additional equipment.

If your video equipment is furnished with a COMMAND MODE selector: set this selector to the same position as the VTR 1/2/3 MDP selector on the TV Remote Commander.

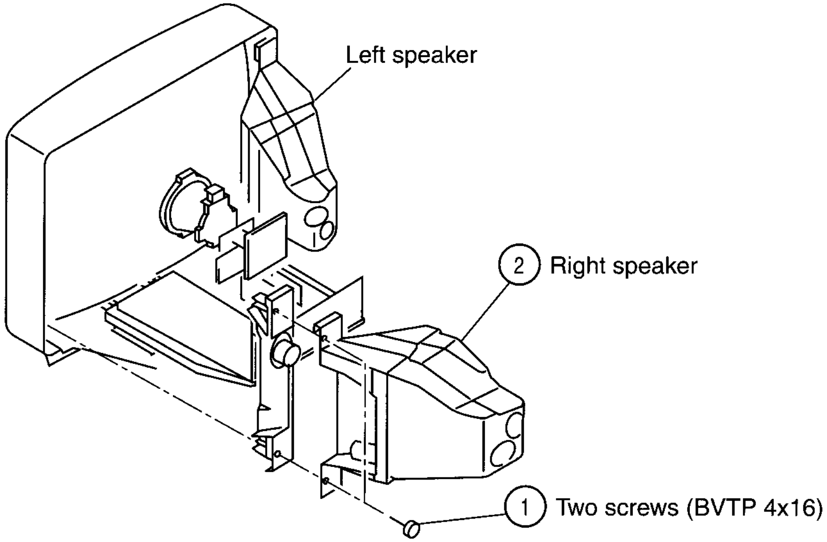
If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate.

SECTION 2
DISASSEMBLY

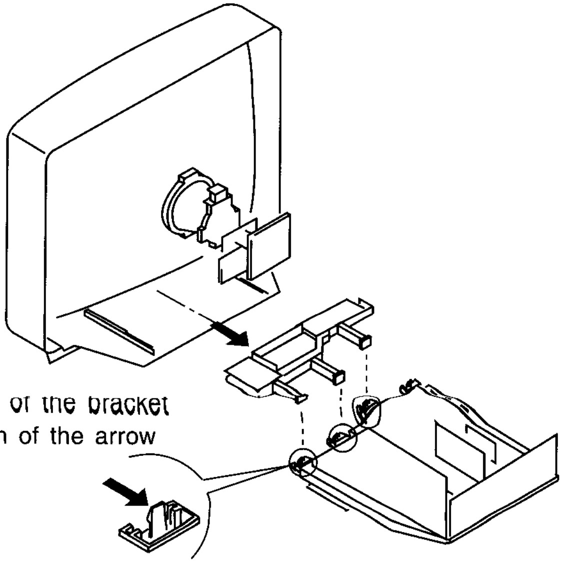
2-1. REAR COVER REMOVAL


② Six screws
(BVTP 4x16)
① One screw
(BVTP 4x16)
③ Rear cover

2-2. SPEAKER REMOVAL

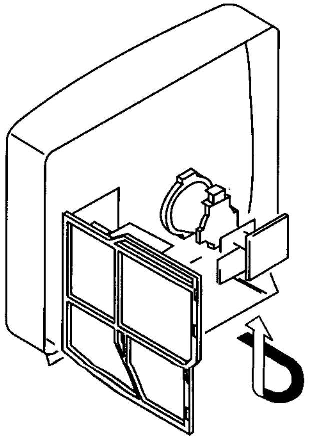

Left speaker
② Right speaker
① Two screws (BVTP 4x16)

2-3. CHASSIS ASSY AND H BRACKET REMOVAL

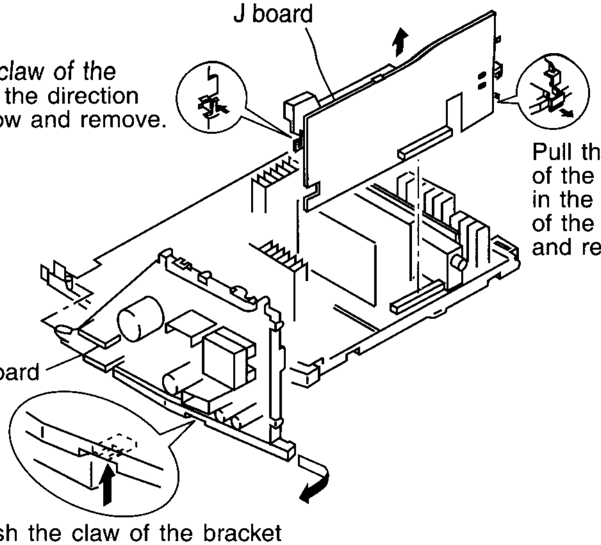


Push the claw of the bracket in the direction of the arrow and remove.

2-4. SERVICE POSITION



2-5. G AND J BOARD REMOVAL


J board
G board

Push the claw of the bracket in the direction of the arrow and remove.

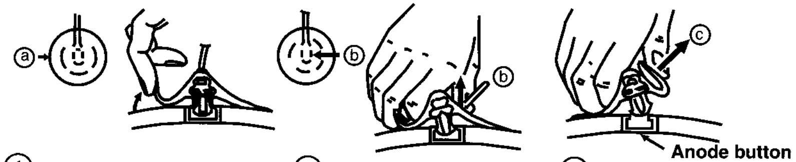
Pull the claw of the bracket in the direction of the arrow and remove.

Push the claw of the bracket in the direction of the arrow and remove.

• REMOVAL OF ANODE-CAP

Note : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

* **REMOVING PROCEDURES.**


ⓐ
ⓑ
ⓑ
ⓒ
Anode button

① Turn up one side of the rubber cap in the direction indicated by the arrowⓐ

② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrowⓑ

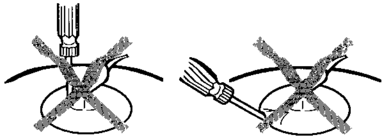
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrowⓒ

- **HOW TO HANDLE AN ANODE-CAP**

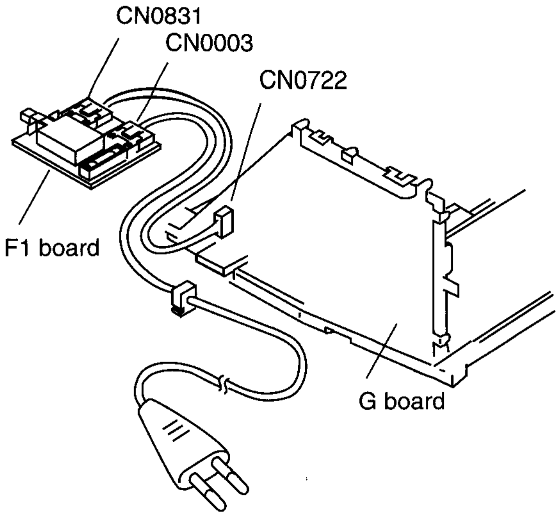
① Don't damage the surface of anode-cap with sharp shaped material !

② Don't press the rubber hardly not to hurt inside of anode-caps !
A metal fitting called as shatter-hook terminal is built into the rubber.

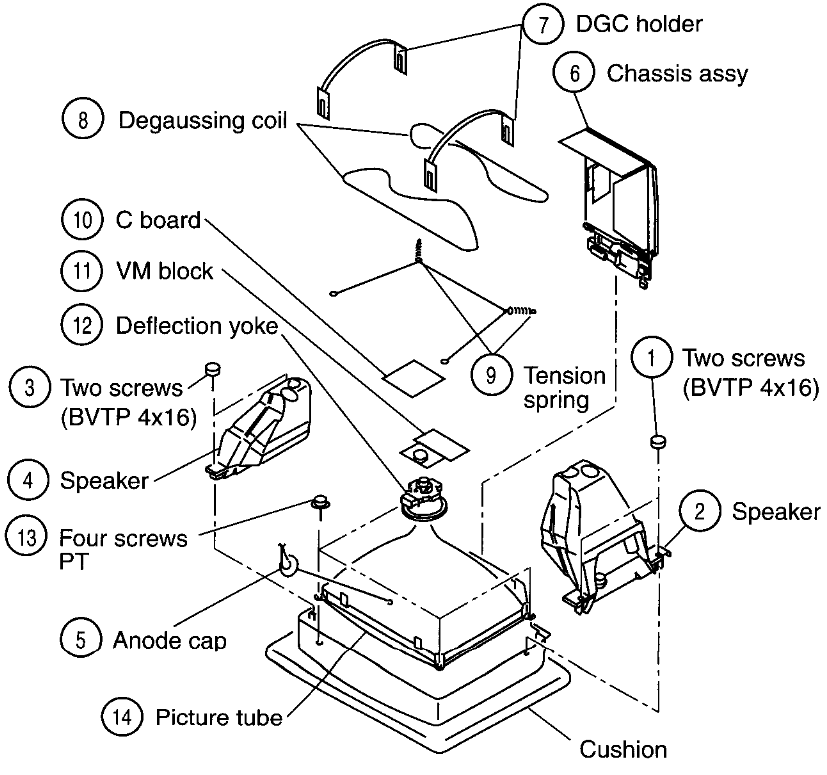
③ Don't turn the foot of rubber over hardly !
The shatter-hook terminal will stick out or damage the rubber.



2-6. WIRE DRESSING


CN0831
CN0003
CN0722
F1 board
G board

2-7. PICTURE TUBE REMOVAL


⑦ DGC holder
⑥ Chassis assy
⑧ Degaussing coil
⑩ C board
⑪ VM block
⑫ Deflection yoke
⑨ Tension spring
③ Two screws (BVTP 4x16)
① Two screws (BVTP 4x16)
④ Speaker
② Speaker
⑬ Four screws PT
⑤ Anode cap
⑭ Picture tube
Cushion

SECTION 3
SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustment with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches as follows.

Contrast .... normal
Brightness .... normal

- Carry out the following adjustments in this order:

3-1. Beam landing
3-2. Convergence
3-3. Focus
3-4. White balance

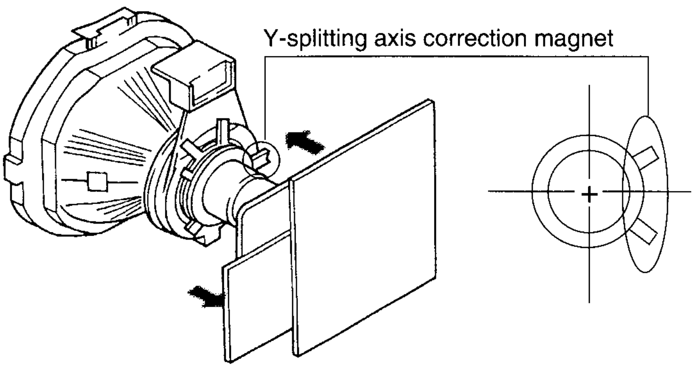
Note: Testing equipment required.
1. Colour bar/pattern generator
2. Degausser
3. Vector scope

3-1. BEAM LANDING

Preparation:
1. In order to reduce the influence of geomagnetism on the set's picture tube face it in an easterly or westerly direction.
2. Switch on the set's power and degauss with the degausser.

(1) Adjustment of Correction Magnet for Y-Splitting Axis

1. Input a crosshatch signal from the pattern generator.
2. Picture control is minimum and brightness control is still normal.
3. Position the neck assy as shown in Fig. 3-2.
4. Move the deflection yoke forward to touch the CRT and it stands up rightly.
5. Adjust the upper pin and the lower pin symmetrically by opening or closing the Y-splitting axis correction magnets on the neck assy.
6. Return the deflection yoke to its original position.



(2) Landing

Note: Before carrying out the following adjustments adjust the magnets as indicated below (See Fig.3-3).
1. Input an all-white signal from the pattern generator. Maximize the picture setting and adjust the brightness setting.
2. Rough-adjust the focus and horizontal convergence.
3. Loosen the deflection yoke screws, align the purity adjustment knob to the central position. (See Fig. 3-1)
4. Switch from the all-white pattern to an all-green pattern.
5. Move the deflection yoke backwards and adjust with the purity magnet so that the green is at the center and it aligns symmetrically. (See Fig. 3-4)
6. Move the deflection yoke forward and adjust so that entire screen becomes green.
7. Switch the raster signal to red, then to blue and verify the landing condition.
8. When the position of the deflection yoke has been determined, fasten the deflection yoke with the screw.
9. If the beam does not land correctly in all the corners, use magnets to correct it. (See Fig. 3-5)

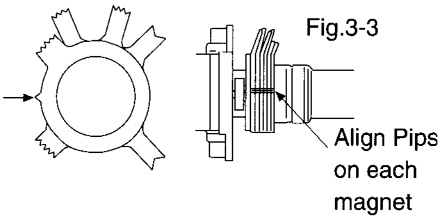


Fig.3-3

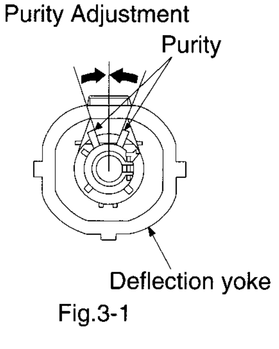
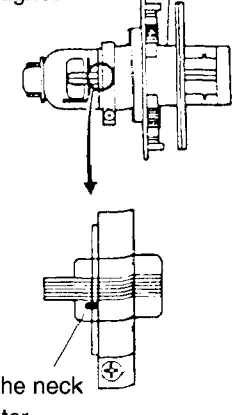


Fig.3-1



Align the bottom edge of the neck assy with the G3 hole center.

Fig .3-2

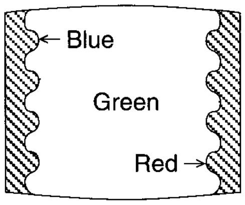

Blue
Green
Red

Fig.3-4

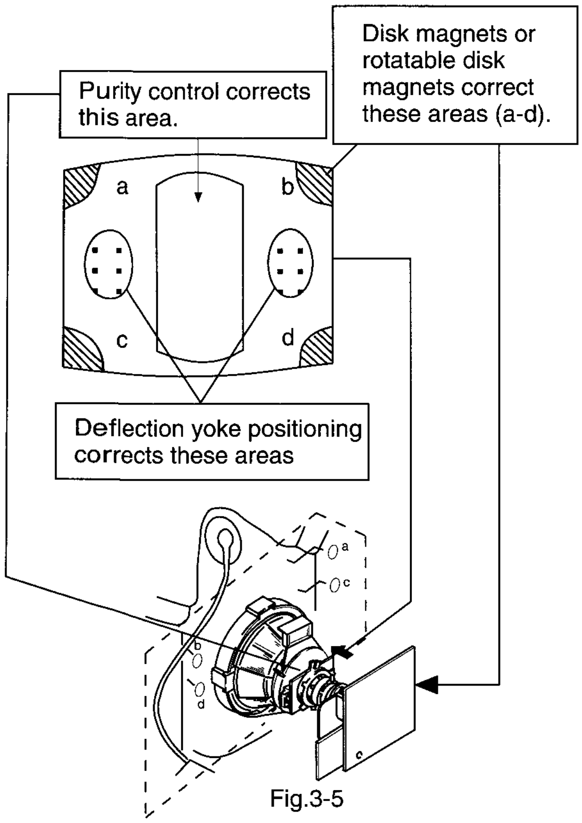
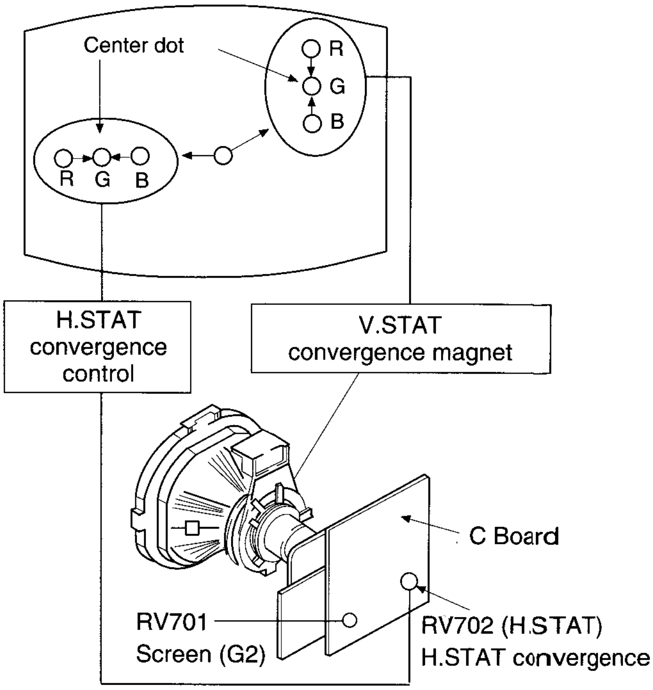

Purity control corrects this area.
Disk magnets or rotatable disk magnets correct these areas (a-d).
a
b
c
d
Deflection yoke positioning corrects these areas
a
c
b
d

Fig.3-5

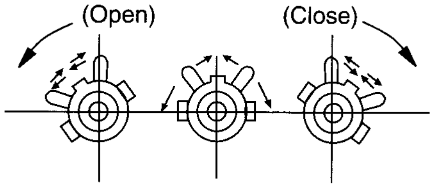
3-2. CONVERGENCE

(1) Screen center convergence (Static convergence)

1. Input a dot signal from the pattern generator. Normalize the picture setting.
2. (Moving horizontally), adjust the H.STAT control so that the horizontal red, green and blue dots coincide at the center of screen.
3. (Moving vertically), adjust the V.STAT magnet so that the vertical red, green and blue points coincide at the center of screen.

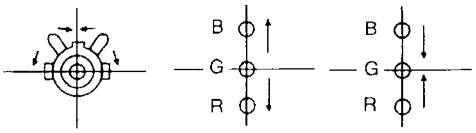

Center dot
R
G
B
R G B
H.STAT convergence control
V.STAT convergence magnet
C Board
RV701
Screen (G2)
RV702 (H.STAT)
H.STAT convergence

- If the horizontal dots are unable to coincide with the variable range of the H.STAT convergence, adjust together with the V.STAT convergence while tracking.
  (Adjust the convergence by tilting the V.STAT convergence or by opening or closing the V.STAT convergence.)

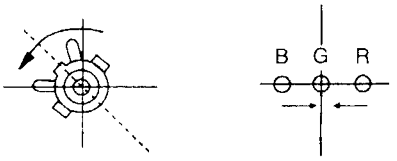


4. Movement of the red, green and blue dots by tilting the V.STAT magnet and by opening or closing the V.STAT magnet.

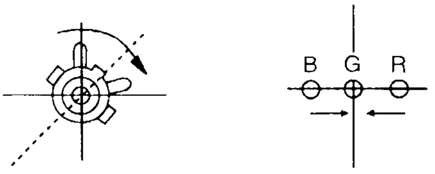
① By opening or closing the V.STAT magnet, the red, green and blue points move as shown below



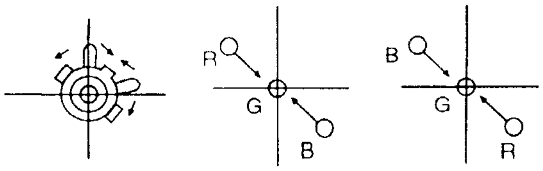
② By rotating the V. STAT magnet counterclockwise, the red, green and blue dots move as shown below.



③By rotating the V.STAT magnet clockwise, the red, green and blue dots move as shown below.



④By opening or closing the V.STAT magnet, the red, green and blue dots move as shown below.

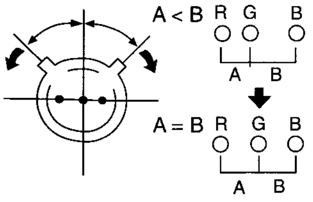


- If the blue dot does not coincide with the red and green points, correct the points by using the BMC (Hexapole) magnet.

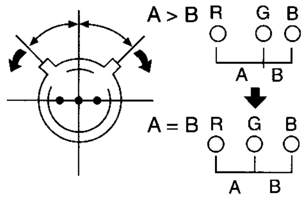
⑤Correction for HMC (horizontal mis-convergence) and VMC (vertical mis-convergence) by using the BMC (Hexapole) magnet.

①HMC correction by BMC (Hexapole) magnet and movement of the electronic beam.

HMC correction (A)

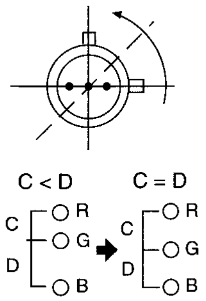

A < B
R G B
A B
A = B
R G B
A B

HMC correction (B)

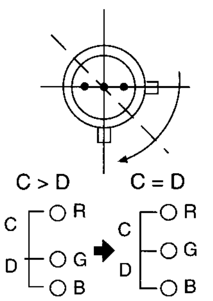

A > B
R G B
A B
A = B
R G B
A B

②VMC correction by BMC (Hexapole) magnet and movement of the electronic beam.

VMC correction (A)


C < D
C = D
C
D
R
G
B
C
D
R
G
B

VMC correction (B)


C > D
C = D
C
D
R
G
B
C
D
R
G
B

Layout of each control

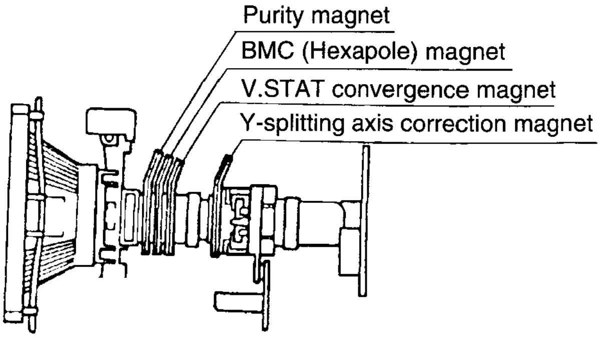
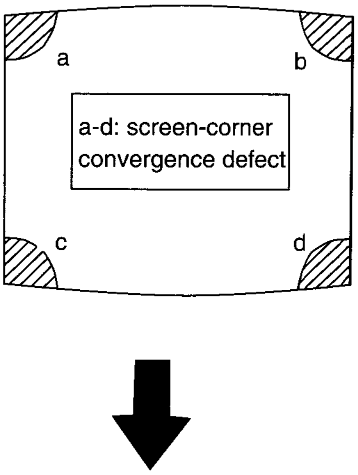
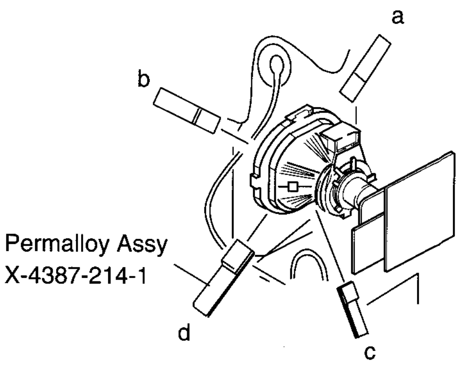

Purity magnet
BMC (Hexapole) magnet
V.STAT convergence magnet
Y-splitting axis correction magnet

Fig.3-5

- If you are unable to adjust the corner convergence properly, correct them with the use of permalloys.

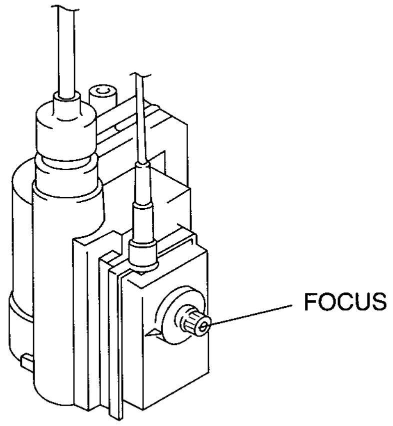

a
b
a-d: screen-corner convergence defect
c
d


a
b
Permalloy Assy
X-4387-214-1
d
c

Convergence adjustment with permalloy

3-3. Focus

1. Receive a television broadcast signal.
2. Normalize the picture setting.
3. Adjust the focus control on the flyback transformer for the best focus at the center of the screen.
   Bring only the center area of the screen into focus, the magenta-ring appears on the screen. In this case, adjust the focus to optimize the screen uniformly.



3-4. Screen (G2), White balance (Adjustment in the service mode with remote commander)

G2 adjustment (RV702)

1. Input a dot signal from the pattern generator.
2. Set the Picture, Brightness and Colour to minimum.
3. Apply 170V DC from an external power supply to the R, G and B cathodes of the CRT.
4. Whilst watching the picture, adjust the G2 control RV701 [SCREEN] on the C board to the point just before the return lines disappear.

White balance adjustment

1. Receive an all-white signal.
2. Enter into the Service Mode by pressing ' TEST ', ' TEST ' and ' 01' on the Service Commander.
3. Select ' CRT Driver ' from the on screen menu display and press OK .
4. The ' CRT Driver CXA1840' menu will appear on screen.

CRT Driver CXA 1840

Crt Driver		CXA1840
21	R DRIVE	41
22	G DRIVE	adj
23	B DRIVE	adj
24	R CUT-OFF	8
25	R C	0
26	G CUT-OFF	adj
27	G C	0
28	B CUT-OFF	adj
29	B C	0
30	AFC MASK	0
31	DRIVE LVL	52
32	SUB BRT	32
33	H SWEEP SW	on
34	SKEW D	off
35	OUT DC	0

5. Set picture to MAX.
6. Set the ' R DRIVE ' to 41.
7. Adjust the ' G DRIVE ' and ' B DRIVE ' with the ▲ ▼ buttons so that the white balance becomes optimum.
8. Press the OK button to write the data for each item.
9. Set picture to MIN.
10. Adjust ' R CUT-OFF ', ' G CUT-OFF' and ' B CUT-OFF ' with the ▲ ▼ buttons so that the white balance becomes optimum.
11. Press the OK button to write the data for each item.

SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander, RM-831.

HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set while pressing the + (plus) and - (minus) buttons on the customer front panel.

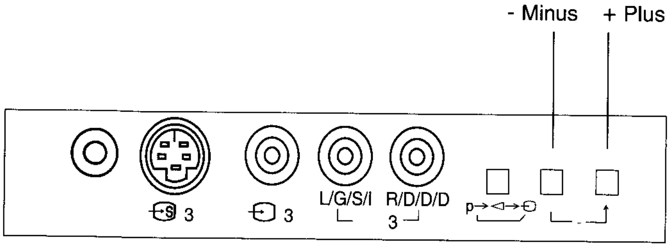


Fig. 4-1

2. "TT" will appear on the upper right corner of the screen.

Command operation in service mode

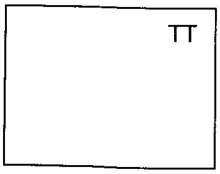


Fig. 4-2

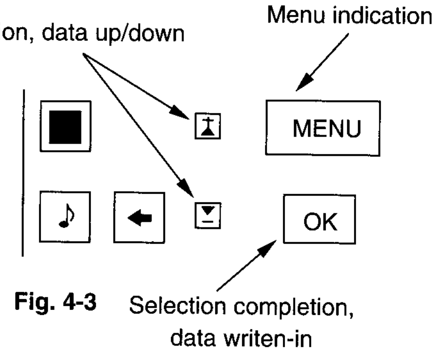


Fig. 4-3

3. Press "Test" " "Test" and 01 on the commander to get the menu on screen.

```
AE -- V7-62          AE-3          08/06/95
Init TV
PIP Adjust
Adjustments
Video Contr
CRT Driver
Dynamic Conv
Video Proc
PIP
PIP Dynamic
Aspect / Field

SRC
TDA6812
PALPLUS
TDA9160
TDA9145
```

4. Press the ▲ and ▼ buttons on the remote commander to select the adjustment item.
5. Press the OK button to proceed to the next menu.
6. If the adjustment item is 'CRT Driver', press the ▼ button to move to 'CRT Driver'.
7. The Menu as indicated in Fig 4-4 will appear on the screen.

	CRT Driver	CXA1840
1	V POS	adj
2	V SIZE	adj
3	V LIN BAL	adj
4	V LIN	adj
5	V SCROLL	127
6	V ASP PAP	2
7	H POS	adj
8	H SIZE	adj
9	H PIN CUSH	adj
10	H TILT	adj
11	H UP COR	adj
12	H LOW COR	adj
13	AFC V BOW	adj
14	AFC V ANGLE	adj
15	V COMP	5

← Back   OK Select

Fig. 4-4

8. Press the ▼ button to move > to the adjustment item and press the OK button.
9. Press the ▲ and ▼ buttons to change the data in order to comply with each standard.
10. Press the OK button to write data into memory.
11. Turn off the power to quit the service mode when adjustments have been completed.

CXA1839 (VIDEO CONT)

Item No	Adjustment item	Data Amount
1	SUB BRT	8
2	SUB COL1	8
3	SUB CONT1	8
4	PIC	53
5	HUE	31
6	COL	31
7	BRT	31
8	SHP	31
9	SUB HUE	7
10	D.COIL	off
11	SHP LIM	off
12	AGE WHT	off
13	R-Y/R	13
14	R-Y/B	15
15	G-Y/R	7
16	G-Y/B	5
17	RGB LEV2	8
18	SUB SHP	3
19	SUB FO	1
20	PRE/OVER	0
21	NR LEVEL	1
22	DC TRAN	0
23	DYN PIC	1
24	CEC LEVEL	2
25	VM LEVEL	2
26	ABL MODE	1
27	DYN ABL	off
28	Y SYM SW	off
29	AGE BLK	off

CXD2035 (ASPECT)

Item No	Adjustment item	Data Amount
1	COMPRESS	7
2	FRAME WID	5

CXD2030 (VIDEO PROCESSOR)

Item No	Adjustment item	Data Amount
1	DNR	on
2	DNR VALUE	5
3	TA SYN CLP	16
4	TB BGP	50
5	TD CLP	25
6	FOTO CD SW	off
7	BLK PORCH	16
8	NT TD BGP	25
9	PAL TD BGP	25
10	N.SECAM TB	50
11	SECAM TB	50
12	358 NR LVL	3
13	443 NR LVL	5

CXD2033D (PIP DYNAMIC)

Item No	Adjustment item	Data Amount
1	443DSP BGP	19
2	358DSP BGP	38
3	SE DSP BGP	19
4	443 LRD H	39
5	358 LRD H	41
6	443MN MPWH	213
7	358MN MPWH	174
8	443 ACC R.	52
9	358 ACC R.	42
10	443MN R RD	39
11	358MN R RD	27
12	FRAME PIP	10
13	FRAME MPX	3

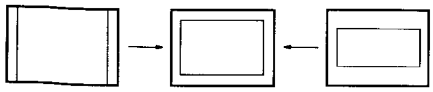
Typical Value (OSD based) when receiving PAL Philips pattern.

DEFLECTION SYSTEM ADJUSTMENT

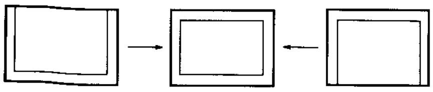
1. Enter into the service mode and select 'CRT Driver'.The 'CRT Driver CXA1840' adjustment menu will be displayed.
2. Select and adjust each item in order to get an optimum image.

Item No	Adjustment item	Data Amount
1	V POS	adj
2	V SIZE	adj
3	V LIN BAL	adj
4	V LIN	adj
5	V SCROLL	127
6	V ASP PAP	2
7	H POS	adj
8	H SIZE	adj
9	H PIN CUSH	adj
10	H TILT	adj
11	H UP COR	adj
12	H LOW COR	adj
13	AFC V BOW	adj
14	AFC V ANGLE	adj
15	V COMP	5
16	H COMP	0
17	WV CENT RF	144
18	WV AREA RF	36
19	W CENT VCR	160
20	W AREA VCR	20

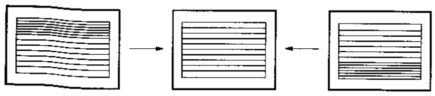
V SIZE



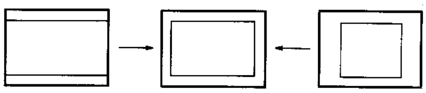
V POS



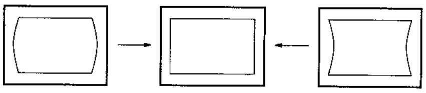
V LIN



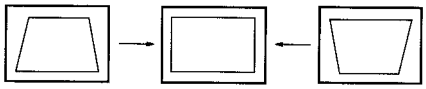
H SIZE



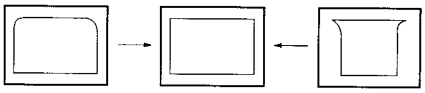
H PIN CUSH



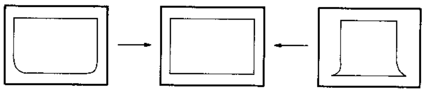
H TILT



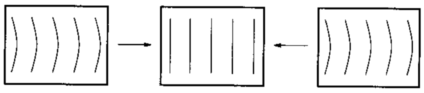
H UP COR



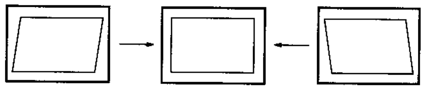
H LOWER COR



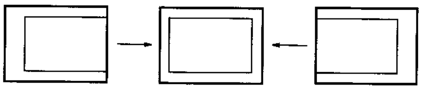
AFC V BOW



AFC V ANGLE



H POS

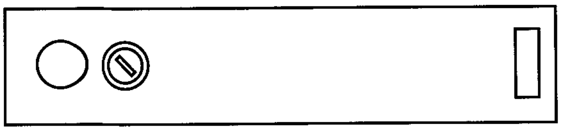


3. Press OK button to write the data.

If the menu display prevents viewing the screen while carrying out the adjustments, it can be removed by pressing 🔇 on the remote commander. Pressing 🔇 once again will restore the menu on screen.

4-2. VOLUME ELECTRICAL ADJUSTMENTS

AGC Adjustment (IF Block)



- IF Block top side -

Fig. 4-5

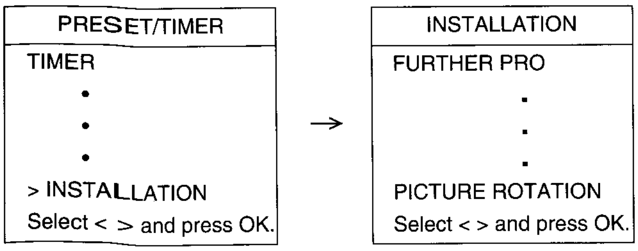
1. Receive an off-air signal.
2. Adjust the AGC VR so that there is no snow noise and cross-modulation visible on the screen.
3. Change the receiving channel and confirm status.

Sub Brightness Adjustment

1. Input a Phillips pattern.
2. Select 'RESET' from the menu to normalize the set.
3. Set the CONTRAST to minimum.
4. Press "Test" "Test" and 01 on the remote commander.
5. Adjust the BRIGHTNESS with the +/- buttons on the remote commander after selection of 'Sub Bright' so that the 0 IRE section of the gray scale is completely cut off and the 20 IRE section is only just visible on the screen.
6. Press 'MENU' and '0' twice to release Test mode 2.
7. Select 'RESET' from the menu to normalize the set.

Picture Rotation Adjustment

1. Input a PAL color bar signal.
2. Press the MENU button on the commander to get the menu on screen.
3. Press the ▲ and ▼ buttons of the commander and move > to PRESET/TIMER followed by INSTALLATION and PICTURE ROTATION.



PRESET/TIMER
TIMER
•
•
•
> INSTALLATION
Select < > and press OK.

→

INSTALLATION
FURTHER PRO
.
.
.
.
PICTURE ROTATION
Select < > and press OK.

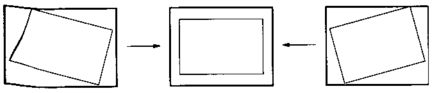


Fig. 4-6

4-3. TEST MODE 2:

Is available by pressing the Test button twice, OSD "TT" appears. The functions described below are available by pressing the two numbers. To release Test Mode 2, press 0, 10, 20 ... twice or switch the TV into Standby Mode. Pressing the two Local Control buttons (+ and –) during Power ON will also switch into "TT" mode.

In TT mode, it is possible to remove the Menu from the screen by pressing the Speaker Off button once. Pressing the Speaker OFF button a second time will cause the menu to reappear . The Function is kept even when the menu is not displayed!!

00	Switch back to normal mode - TT mode off
01	Switch service menu on
02	Direct access to Noise reduction
03	Set Volume to 30%
04	Service Menu in "Service Mode"
05	Service Menu in "Production Mode"
06	Set Volume to 80%
07	Aging mode
08	Shipping condition (Production request) To ensure that all TV sets leave the Production with the same pressettings. Programme 1 is selected, AV IN is set to AV1, AV Out is set to TV Out, Volume and HP Volume is set to 35%, Resolution is set to high, Format is set to 4:3, Pip is set to Top Left position, Pip is switched off, TT mode is switched off, all analogue values are set to the reset setting, space Sound - Equalizer - Loudness = off, DNR off, Dig. Mode = 1, Wide Zoom Mode for 28W models, Menu Language Reset, Prog. Pointer table reset Non Interlace is allowed in Text mode.
09	Language reset. With this function the "Language Byte" in the NVM (Bank 0AAH Address 0DCH) is erased (set to 0FFH). The Language Menu appears now automatically when the TV set is switched ON as long as no new language is selected.
10	The TT number will be deleted. All numbers with 0 (10, 20, 30, 40, 50, 60, 70, 80, 90) will reset the TT number. A new number can be selected. TT display is kept
11	Direct access to Balance. With Cursor Up/Down the Balance can be controlled (w/o OSD, Menu display)
12	Direct access to Hue. With Cursor Up/Down the Hue can be controlled (w/o OSD, Menu display)
13	Dispaly of Software Version and TV set configuration
14	Production Info Display
15	Read factory setting from ROM (Program code) and store this data at Last Power Memory data location (The previous last power memory data is overwritten) AE3 has 3 packages of Analogue data: 1. Last Power memory data. This data is sent continiously to the corresponding IC's (TDA1839, SC, TDA6812) with this data the TV picture/sound appears. 2. Reset data. By presssing "Reset" in the menu this data is transfered from Reset Data location to the Last Power data location in the NVM. That means the Last Power Memory Data is overwritten by the Reset data last Power memory and Reset data is now the same. 3. Factory fixed data. Fixed data is held in the ROM code of the micro processor (ROM can't be changed)

16	Save actual Last Power Memory data at Reset Data location)The previous Reset data is overwritten)
15/16	With these two functions, it is possible to preset user defined Reset values (just TT16) or to preset factory defined Reset values (first TT15 then TT16)
17	This function presets the Labels for the AV sources: AV1, RGB, AV2, YC2, AV3, YC3, AV4, YC4.
18	Text possible On/Off selection of Text (toggle function)
19	Direct access to Stereo Separation With cursor Up/Down the Stereo separation can be adjusted (w/o OSD, Menu display)
20	see TT10
21	Picture Rotation automatic function : (-4) -> (+4) -> 0
22	Operating Timer and Error Monitor display
23	Direct access to Sub Brightness Adjustment With cursor Up/Down the Sub BRT can be adjusted (w/o OSD, Menu display)
24	Direct access to Sub Color. With Cursor Up/Down the Sub Color can be adjusted.
25	Status menu display (SubController, CXA1840 Status, Main Controller.
26	Text Character selection (Char set 06 ->West Europe)
27	Text Character selection (Char set 38 ->East Europe)
28	Text Character selection (Char set 40 ->West Europe) US English
29	Text Character selection (Char set 55 ->West Europe) Turkish
30	see TT10
31	Text Character selection Char set Russian
32	Text Character selection Char set Greek
33	Programme catching test (Programme catching can be released by "Menu command")
34	Multi PIP adjustment. Direct access to 3.58 horizontal write position. With Cursor Up/Down the 358 H write Pos can be adjusted (w/o OSD, Menu display).
35	Multi PIP adjustment. Direct access to 4.43 horizontal write position. With Cursor Up/Down the 443 H write Pos can be adjusted (w/o OSD, Menu display).
36	Mtx Register 112 = intern display clock
37	Mtx Register 112 = extern display clock

38	Automatic selection of Screen Modes: (not for S (4:3) Models. 4:3 -> Zoom -> Zoom up -> Zoom Center -> Zoom down -> Zoom Center -> smart -> (if Pal+ signal) PALPLUS -> wide.
39	Reset Programme Table (NVM Bank 0ACH) The sorting of programmes in "Programme Sorting Menu" is reset.
40	see TT10
41	no function
42	no function
43	no function
44	no function
45	Set NVM to Protect mode (Bank 0AEH Adr. 0FFH write with 0)
46	IR Channel Pressetting Mode. The channel pressetting can be done by a Special IR transmitter Sequence: TT46 -> -- PR Number select dispaly appears Select Prog. No from where the channel shall be stored. --> Now TV is waiting for IR sequence <-- --> If no IR transmission starts TT46 is released after 20 secs <-- !Note: When TT46 is active, any transmission will be interpreted as PROG data !
47	Direct access to Headphone Source Selection (Production use)
48	Direct access to AGC Adjustment (PWM) output.
49	The EEPROM Testbyte is erased. After Power OFF -> ON the complete EEPROM data (exept channel tables) is overwritten. EEPROM Protection byte is set to 0 protection mode
50	see TT10
51	Strobo mode is activated.
52	no function.
53	Photo mode test (Photo mode can be released by "Menu command").
54	Direct access to Velocity Modulation VM (Production use)
55	MTX Slicer Control "Low Pass" (only Sys L)
56	MTX Slicer Control "No Compensation"
57	Megatext Service Menu ON
58	MTX Small Framing Code Window
59	MTX Wide Framing Code Window
60	see TT10

61	Set Dolby default values.
62	ACI disable.
63	ACI enable.
64	Reset all IIC Slave commands (Production use)
65	Reset stored error codes in NVM.
66	Reset for PALplus local controller and Sub Controller.
67	Direct access to Headphone Volume. With cursor Up/Down the Headphone Volume can be controlled (w/o OSD, menu display) (Production use)
68	ignore errors.
69	reset ignore errors (show errors)
70	see TT10
71	Picture Rotation Function On/Off toggle.
72	Dolby register setting menu.
73	Megatext RGB textlevel one step decreased (max 3 steps down starting from E0h) (Production use)
74	Megatext RGB textlevel one step decreased (max 1 steps down starting from E0h) (Production use)
75	reserved
76	CXD 2030 Default data setting.
77	CXD 2031 Default data setting
78	CXD 2032 Default data setting
79	CXD 2033 Default data setting
80	see TT10
81	CXD 2033D Default data setting
82	CXD 2035 Default data setting
83	CXA 1526 Default data setting
84	CXA 1839 Default data setting
85	CXA 1840 Default data setting
86	TDA 9145 Default data setting
87	TDA 9160 Default data setting
88	no function
89	no function
90	see TT10

4-4. ERROR MONITOR AND DETECTION

In the menu 'Error Monitor', information about the error status of the set is displayed.

- Actual operating time
- Last five errors which are stored in the NVM.
- Actual error.

Error Monitor

Operating Time
000355 h 35min

Saved Errors
1. 40h=D1 Board
2.. 60h=Q Board
3. 70h=T Board
4. 00h=no error occured
5. 00h=no error occured

Actual Error
-> 00h=no error occured

to reset the NVM press 'TT' 65

Additionally the Error Reader can be connected to the service connector to read out the actual errors.

The device check itself is active while the TV set is running out of stand-by mode. The devices are checked by sending an I^2C start sequence and if there is no acknowledgement back from the devices it is regarded as an error. Each device is checked three times and if at every attempt there is no reply from the relevant device an error is given. To read the error codes press 'TT' followed by 22 on the commander to view the Error Monitor menu.

To reset the error codes in the NVM press 'TT' followed by 65 on the remote commander.

TABLE OF ERROR CODES

Error Code	Device	Description	Board
000h	no device	no error has occured	-
001h	IIC 1 and IIC 2	IIC 1 and IIC 2 blockaded	-
002h	IIC 1	IIC1 is blockaded	-
003h	IIC 2	IIC 2 is blockaded	-
010h	A Board	A Board is defective	-
020h	A1 Board	A1 Board is defective	-
030h	BX-Board (B,B1,B2)	B, B1, or B2 Board is defective	-
040h	D1 Board	D1 Board defect	-
050h	J Board	J Board defect	-
060h	Q Board	Q Board defect	-
070h	T Board	T Board defect	-
011h	CXP85332	No response from the Subcontroller	A
012h	ST24C16	No response from the NVM	A
013h	SDA5273	No response from the Megatext IC	A
014h	TDA6812	No response from the Sound Processor	A
015h	SAA7283	No response from the Nicam Decoder	A
016h	UV916H	No response from the Main Tuner	A
017h	CXA1839Q	No response from the Video Controller	A
018h	CXA1840	No response from the CRT Driver	A
019h	RGB8443	No response from RGB/YUV	A
021h	TDA6622	Audio processor of the Center and Surround channel in the case of Dolby Prologic does not respond.	A1
022h	TDA7317	No response from the Equalizer.	A1
031h	CXD2030R	No response from the Digital Video Processor.	B/B1
032h	CXD2031R	No response from the Twin Picture IC.	B1
033h	CXD2032R	No response from the Digital Sampling Rate Converter.	B/B1
034h	CXD2033R	No response from the Picture in Picture IC.	B
035h	CXD2035R	No response from the Aspect Converter.	B/B1
036h	TDA9160	No response from the Chroma Decoder.	B/B1
037h	TDA9145	No response from the Chroma Decoder (on French models only.)	B2
041h	CXA1526	No response from the Convergence IC.	D1
051h	CXA1855	No response from the AV-Switch	J
061h	83C65202	No response from the Local Controller.	Q
071h	UV1316/TSA5526	No response from the Subtuner.	T
072h	CXA1875	No response from the Port Expander.	T

4-5. LED Error Blinking

In addition to the Error Monitor facility there is an additional error indicator which indicates the most important errors also in the case of IIC error and Megatext error in opposition to the error monitor.

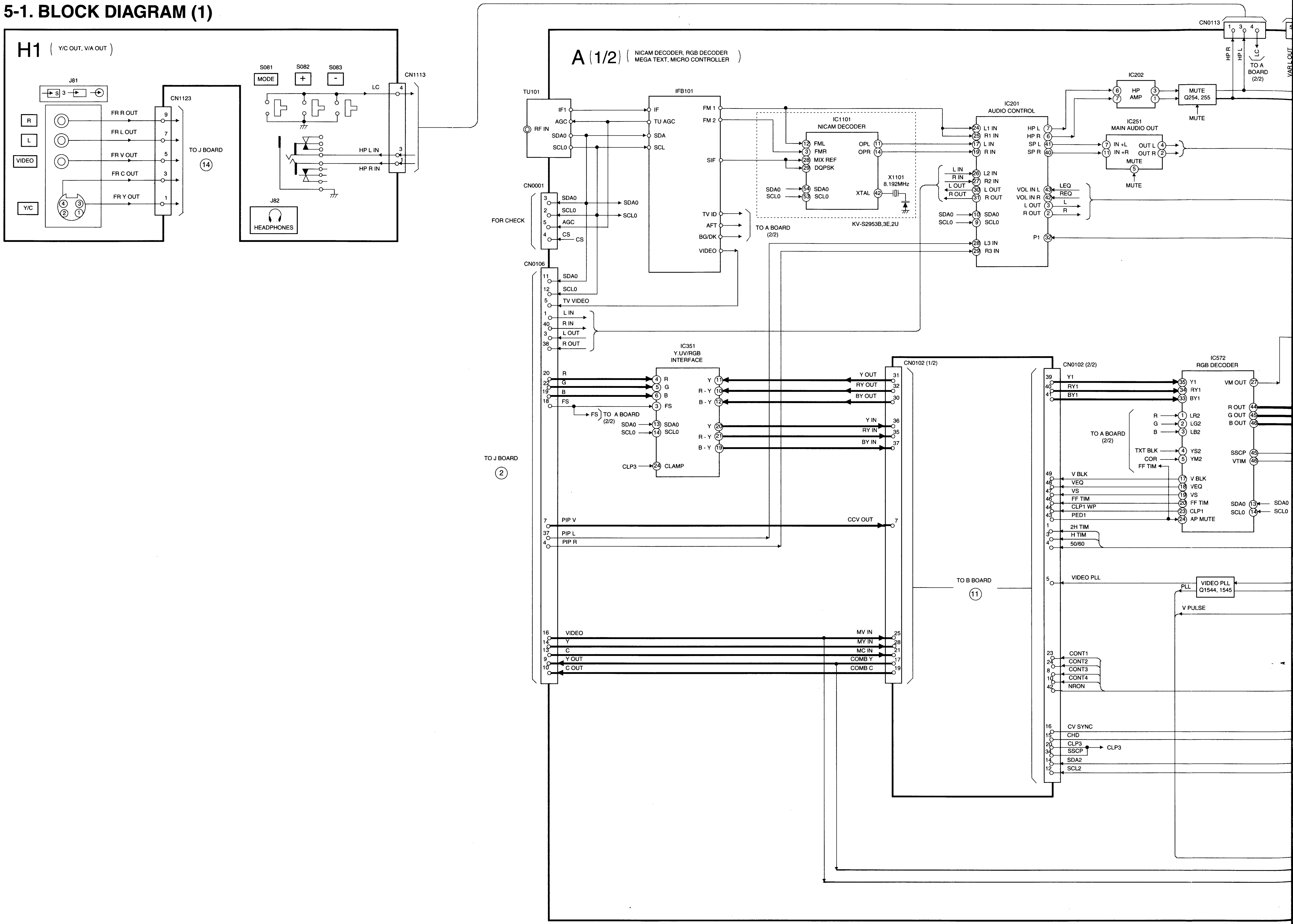
The error is recorded by counting the number of times that LED B blinks. This facility also works while in stand-by mode.

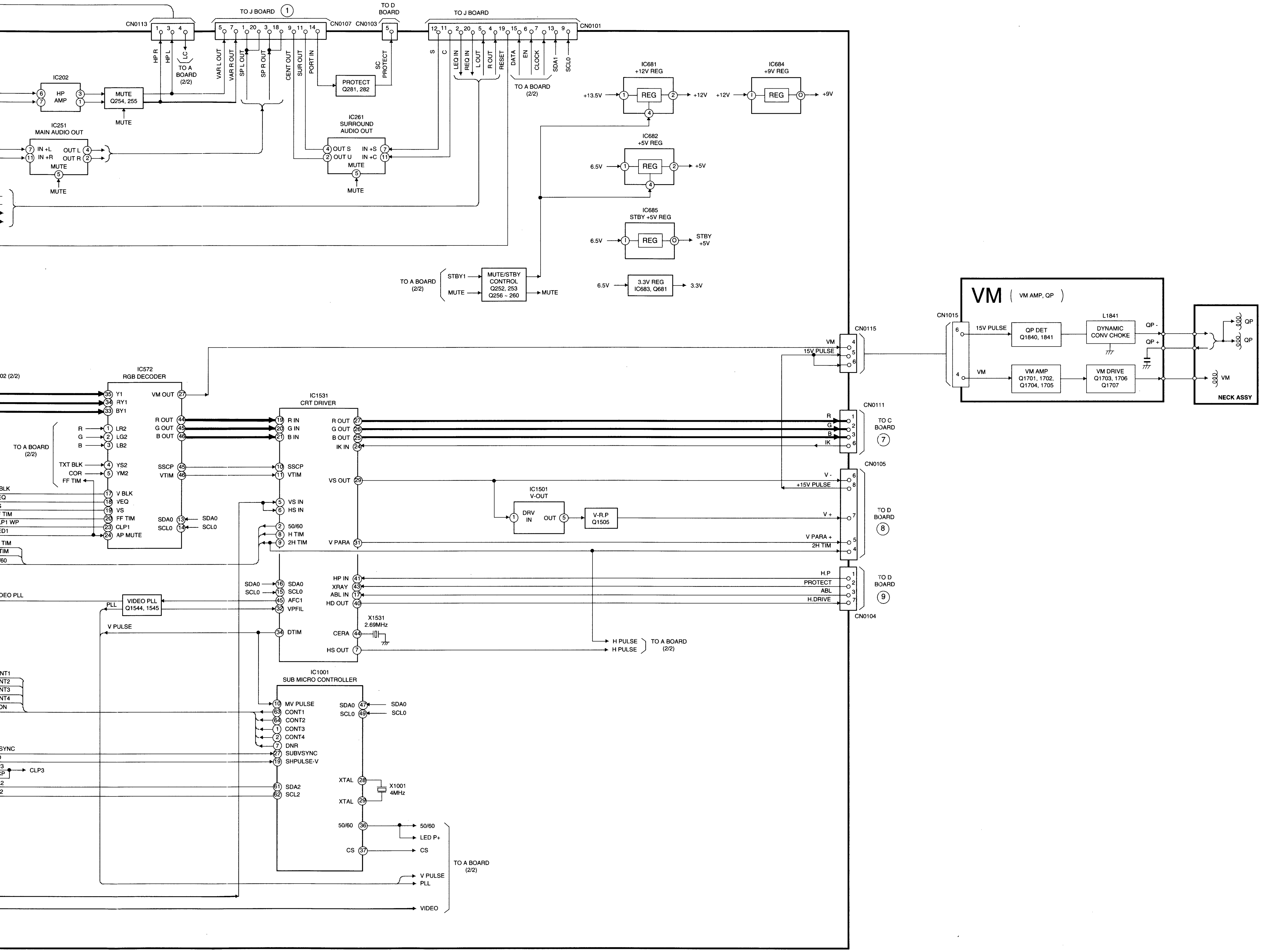
LED Error Code.

Error	number of LED B blinking	Description	Board
0	1	general IIC error	-
1	2	ST24C16 NVM error	A
2	3	CXP85332 subcontroller error	A
3	4	CXD2030R error of Digital Video Processor	B/B1
4	5	CXD2032R error of Digital Sampling Rate Converter	B/B1
5	6	CXD2035R error of Aspect Converter	B/B1
6	7	TDA1839 error of Video Controller	A
7	8	TDA1840 error of CRT Driver	A
8	9	CXA1855 error of AV switch	J
9	11	SDA5273 error of Megatext	A
10	12	TDA6812 error of Sound Processor	A
11	16	V-Protection (In this case the TV set is switched of immediately)	-

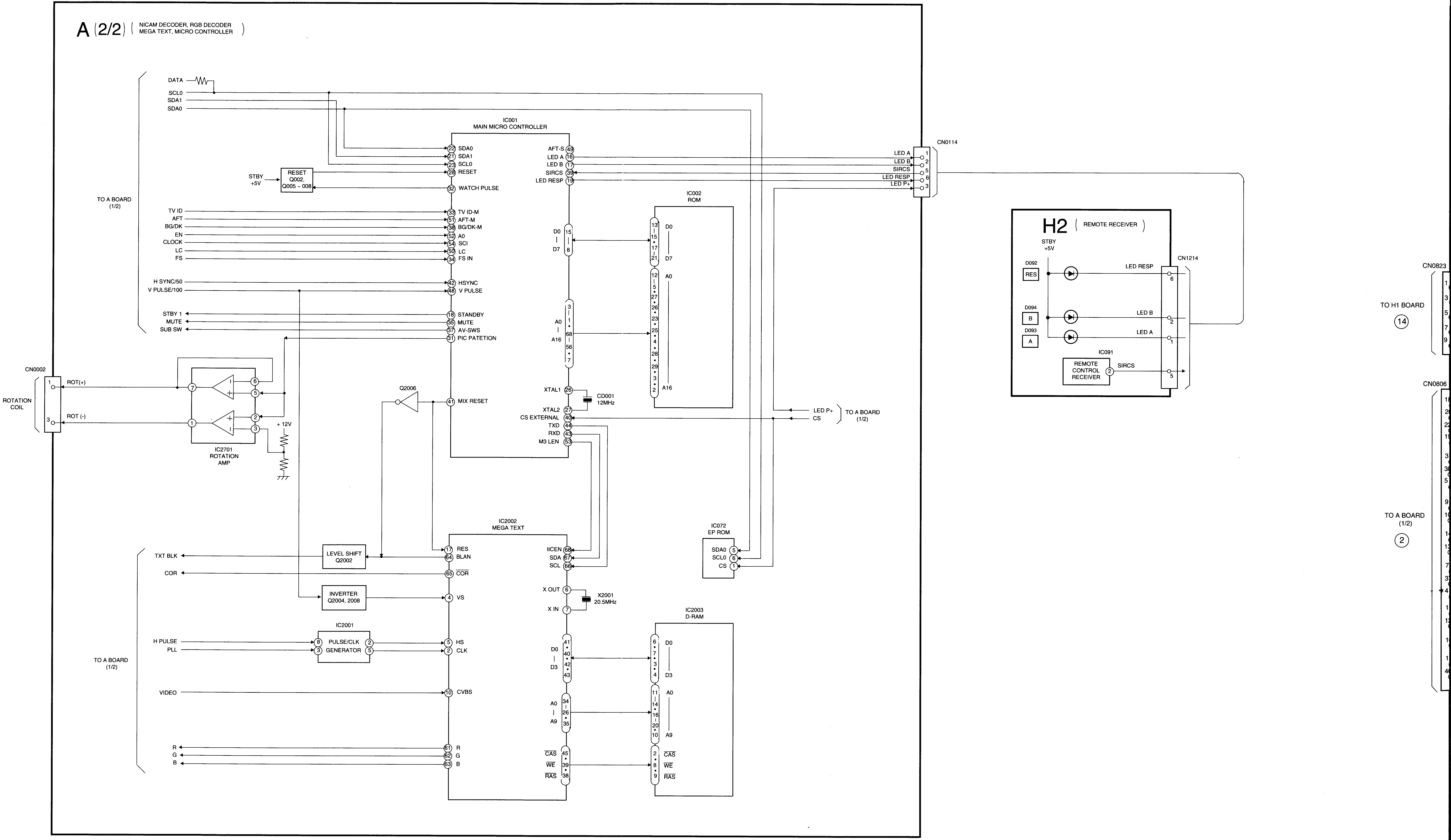
SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM (1)

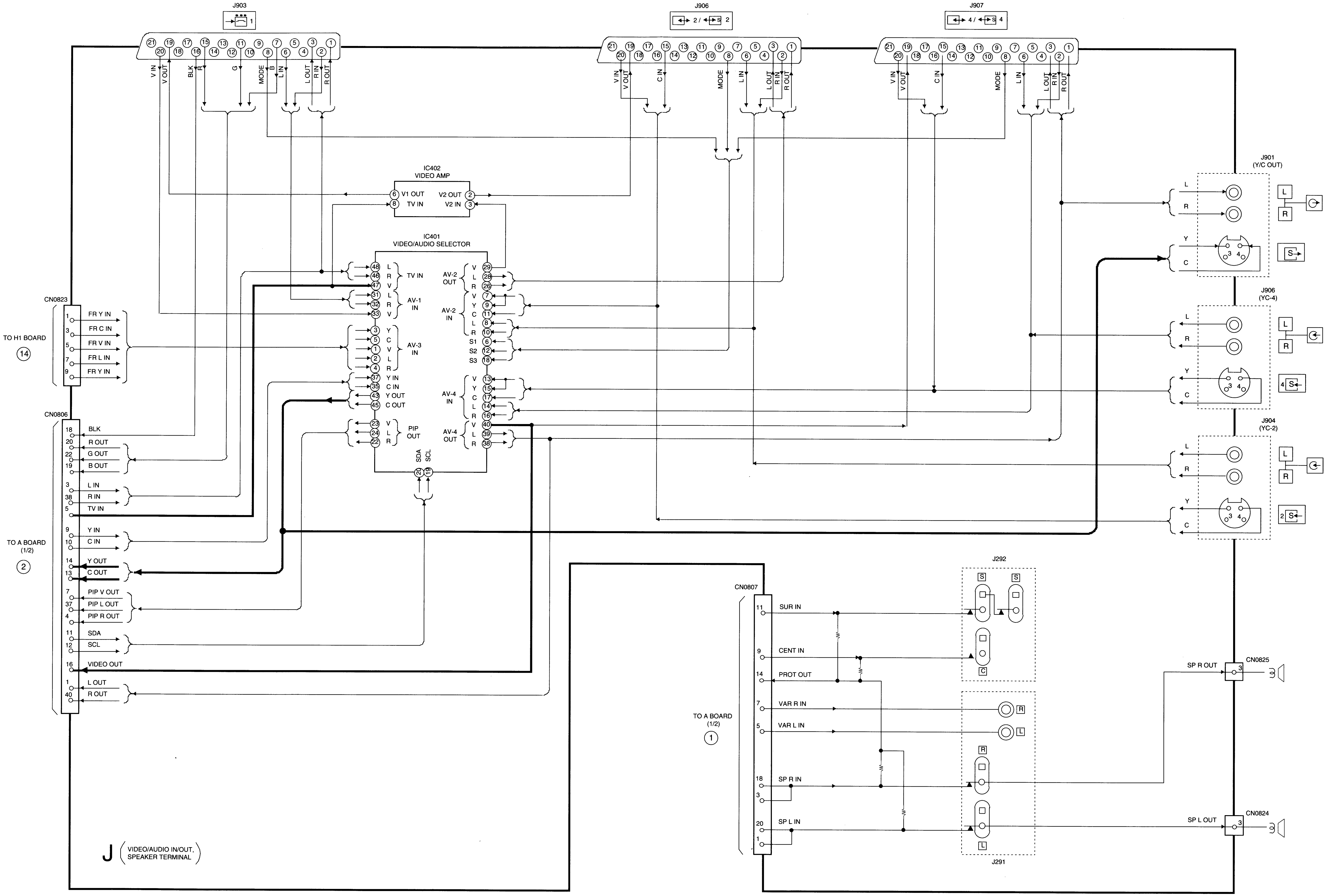

H1 (Y/C OUT, V/A OUT)
J81
R
L
VIDEO
Y/C
FR R OUT
FR L OUT
FR V OUT
FR C OUT
FR Y OUT
CN1123
TO J BOARD ⑭
S081 MODE
S082 +
S083 -
LC
CN1113
HP L IN
HP R IN
J82
HEADPHONES
A (1/2) (NICAM DECODER, RGB DECODER MEGA TEXT, MICRO CONTROLLER)
TU101
IF1
AGC
RF IN
SDA0
SCL0
IFB101
IF
TU AGC
SDA
SCL
FM 1
FM 2
SIF
TV ID
AFT
BG/DK
VIDEO
TO A BOARD (2/2)
IC1101 NICAM DECODER
FML
FMR
MIX REF
DQPSK
OPL
OPR
SDA0
SCL0
XTAL
X1101 8.192MHz
KV-S2953B,3E,2U
IC201 AUDIO CONTROL
L1 IN
R1 IN
L IN
R IN
L2 IN
R2 IN
L OUT
R OUT
L3 IN
R3 IN
HP L
HP R
SP L
SP R
VOL IN L
VOL IN R
P1
LEQ
REQ
IC202 HP AMP
MUTE Q254, 255
MUTE
IC251 MAIN AUDIO OUT
IN +L
IN +R
OUT L
OUT R
CN0113
HP R
HP L
LC
TO A BOARD (2/2)
VAR L OUT
CN0001
FOR CHECK
CS
CN0106
TV VIDEO
PIP V
PIP L
PIP R
Y OUT
C OUT
TO J BOARD ②
IC351 Y.UV/RGB INTERFACE
R
G
B
FS
CLAMP
CLP3
Y
R - Y
B - Y
TO A BOARD (2/2)
CN0102 (1/2)
Y OUT
RY OUT
BY OUT
Y IN
RY IN
BY IN
CCV OUT
MV IN
MY IN
MC IN
COMB Y
COMB C
TO B BOARD ⑪
CN0102 (2/2)
Y1
RY1
BY1
V BLK
VEQ
VS
FF TIM
CLP1 WP
PED1
2H TIM
H TIM
50/60
VIDEO PLL
CONT1
CONT2
CONT3
CONT4
NRON
CV SYNC
CHD
CLP3
SSCP
SDA2
SCL2
IC572 RGB DECODER
LR2
LG2
LB2
YS2
YM2
TXT BLK
COR
FF TIM
AP MUTE
CLP1
VM OUT
R OUT
G OUT
B OUT
SSCP
VTIM
VIDEO PLL Q1544, 1545
PLL
V PULSE


TO J BOARD ①
TO D BOARD
TO J BOARD
CN0113
CN0107
CN0103
CN0101
HP R
HP L
LC
TO A BOARD (2/2)
VAR L OUT
VAR R OUT
SP L OUT
SP R OUT
CENT OUT
SUR OUT
PORT IN
SC PROTECT
PROTECT Q281, 282
S
C
LEQ IN
REQ IN
L OUT
R OUT
RESET
DATA
EN
CLOCK
SDA1
SCL0
TO A BOARD (2/2)
IC202 HP AMP
MUTE Q254, 255
MUTE
IC251 MAIN AUDIO OUT
IN +L
IN +R
OUT L
OUT R
MUTE
IC261 SURROUND AUDIO OUT
OUT S
OUT U
IN +S
IN +C
IC681 +12V REG
+13.5V
REG
+12V
IC684 +9V REG
+9V
IC682 +5V REG
6.5V
+5V
IC685 STBY +5V REG
STBY +5V
TO A BOARD (2/2)
STBY1
MUTE
MUTE/STBY CONTROL Q252, 253 Q256 - 260
3.3V REG IC683, Q681
3.3V
IC572 RGB DECODER
VM OUT
Y1
RY1
BY1
R OUT
G OUT
B OUT
R
G
B
LR2
LG2
LB2
TO A BOARD (2/2)
TXT BLK
COR
FF TIM
YS2
YM2
V BLK
VEQ
VS
FF TIM
CLP1
AP MUTE
SSCP
VTIM
SDA0
SCL0
IC1531 CRT DRIVER
R IN
G IN
B IN
IK IN
VS OUT
VS IN
HS IN
50/60
H TIM
2H TIM
V PARA
HP IN
XRAY
ABL IN
HD OUT
AFC1
VPFIL
DTIM
CERA
HS OUT
X1531 2.69MHz
VIDEO PLL Q1544, 1545
PLL
V PULSE
IC1501 V-OUT
DRV IN
OUT
V-R.P Q1505
H PULSE
H PULSE
TO A BOARD (2/2)
IC1001 SUB MICRO CONTROLLER
MV PULSE
CONT1
CONT2
CONT3
CONT4
DNR
SUBVSYNC
SHPULSE-V
SDA2
SCL2
XTAL
X1001 4MHz
50/60
LED P+
CS
V PULSE
PLL
VIDEO
TO A BOARD (2/2)
CLP3
CN0115
VM
15V PULSE
CN0111
TO C BOARD ⑦
IK
CN0105
V -
+15V PULSE
V +
V PARA +
2H TIM
TO D BOARD ⑧
CN0104
H.P
PROTECT
ABL
H.DRIVE
TO D BOARD ⑨
VM (VM AMP, QP)
CN1015
15V PULSE
QP DET Q1840, 1841
L1841
DYNAMIC CONV CHOKE
QP -
QP +
VM AMP Q1701, 1702, Q1704, 1705
VM DRIVE Q1703, 1706 Q1707
QP
QP
VM
NECK ASSY

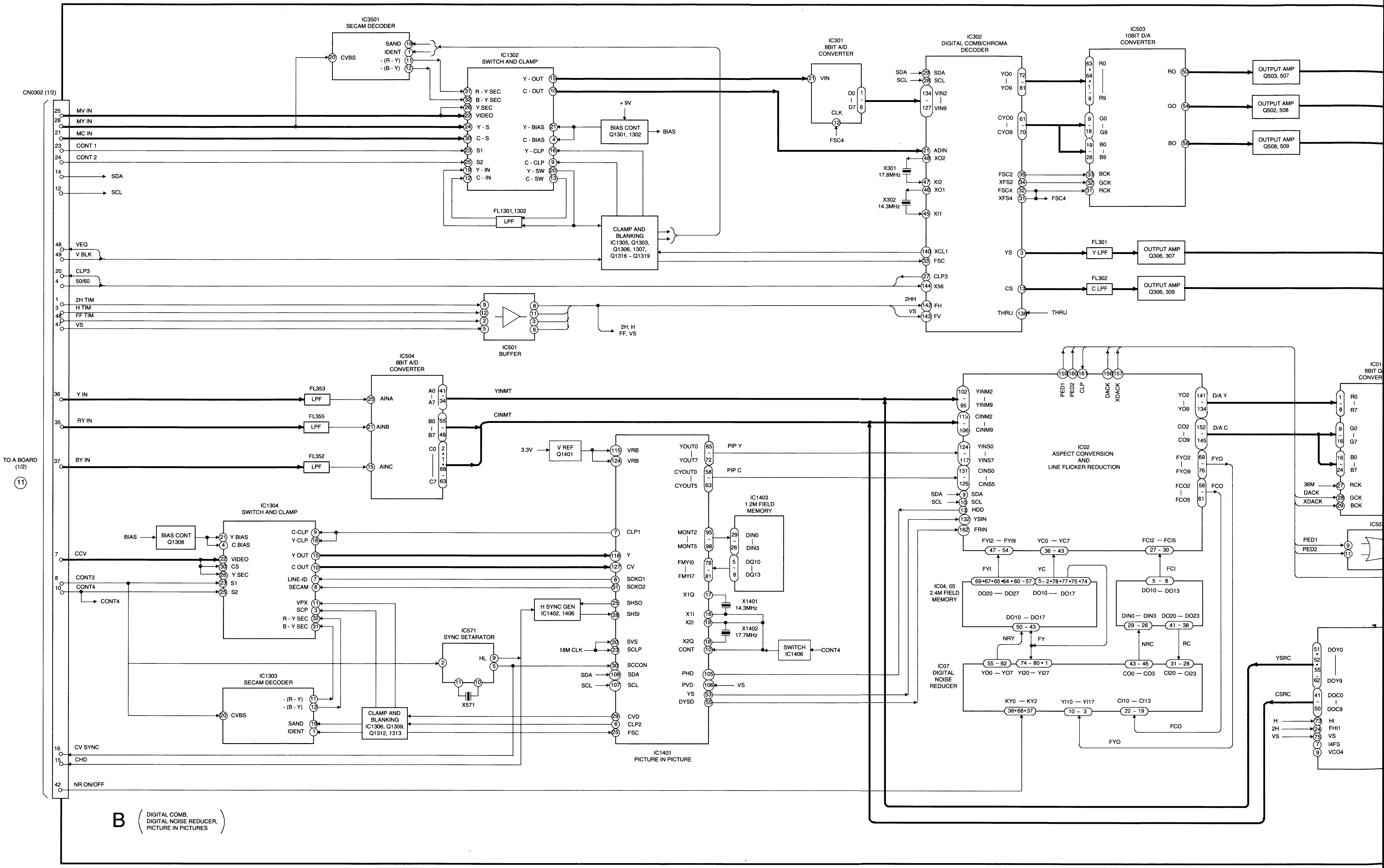
BLOCK DIAGRAM (2)

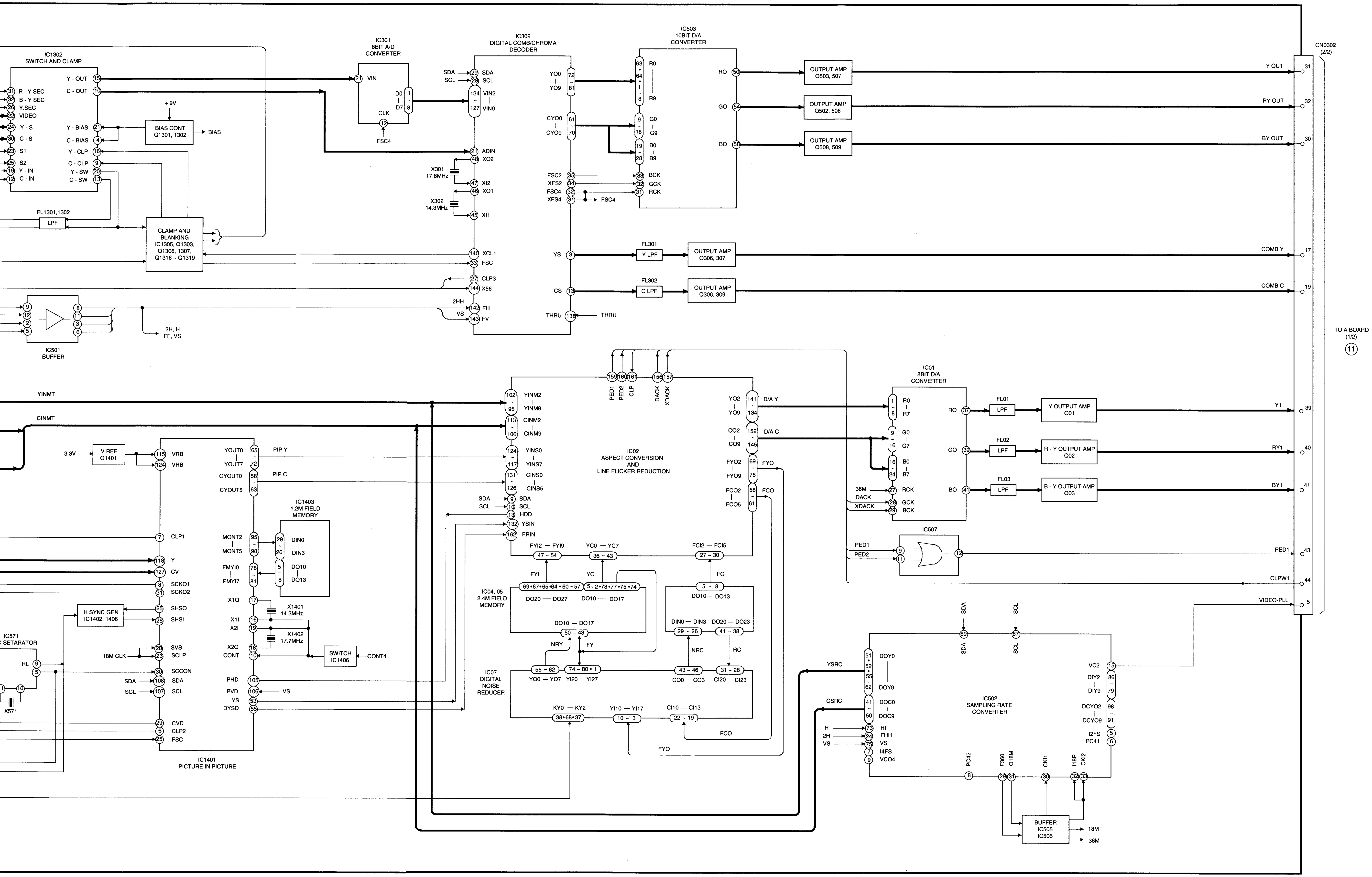

A (2/2) (NICAM DECODER, RGB DECODER MEGA TEXT, MICRO CONTROLLER)
DATA
SCL0
SDA1
SDA0
TO A BOARD (1/2)
IC001 MAIN MICRO CONTROLLER
SDA0
SDA1
SCL0
RESET
WATCH PULSE
STBY +5V
RESET Q002, Q005 ~ 008
TV ID
AFT
BG/DK
EN
CLOCK
LC
FS
TV ID-M
AFT-M
BG/DK-M
A0
SCI
LC
FS IN
H SYNC/50
V PULSE/100
HSYNC
V PULSE
STBY 1
MUTE
SUB SW
STANDBY
MUTE
AV-SWS
PIC PATETION
MIX RESET
AFT-S
LED A
LED B
SIRCS
LED RESP
D0 – D7
A0 – A16
XTAL1
XTAL2
CS EXTERNAL
TXD
RXD
M3 LEN
CD001 12MHz
IC002 ROM
D0
D7
A0
A16
CN0114
LED A
LED B
SIRCS
LED RESP
LED P+
LED P+
CS
TO A BOARD (1/2)
CN0002
ROTATION COIL
ROT(+)
ROT (-)
IC2701 ROTATION AMP
+ 12V
Q2006
IC2002 MEGA TEXT
RES
BLAN
COR
VS
HS
CLK
CVBS
R
G
B
IICEN
SDA
SCL
X OUT
X IN
X2001 20.5MHz
D0 – D3
A0 – A9
CAS
WE
RAS
IC072 EP ROM
SDA0
SCL0
CS
IC2003 D-RAM
D0
D3
A0
A9
CAS
WE
RAS
TXT BLK
COR
LEVEL SHIFT Q2002
INVERTER Q2004, 2008
IC2001
PULSE/CLK GENERATOR
H PULSE
PLL
VIDEO
R
G
B
TO A BOARD (1/2)
H2 (REMOTE RECEIVER)
STBY +5V
D092 RES
D094 B
D093 A
LED RESP
LED B
LED A
IC091
REMOTE CONTROL RECEIVER
SIRCS
CN1214
CN0823
TO H1 BOARD ⑭
CN0806
TO A BOARD (1/2) ②

BLOCK DIAGRAM (3)

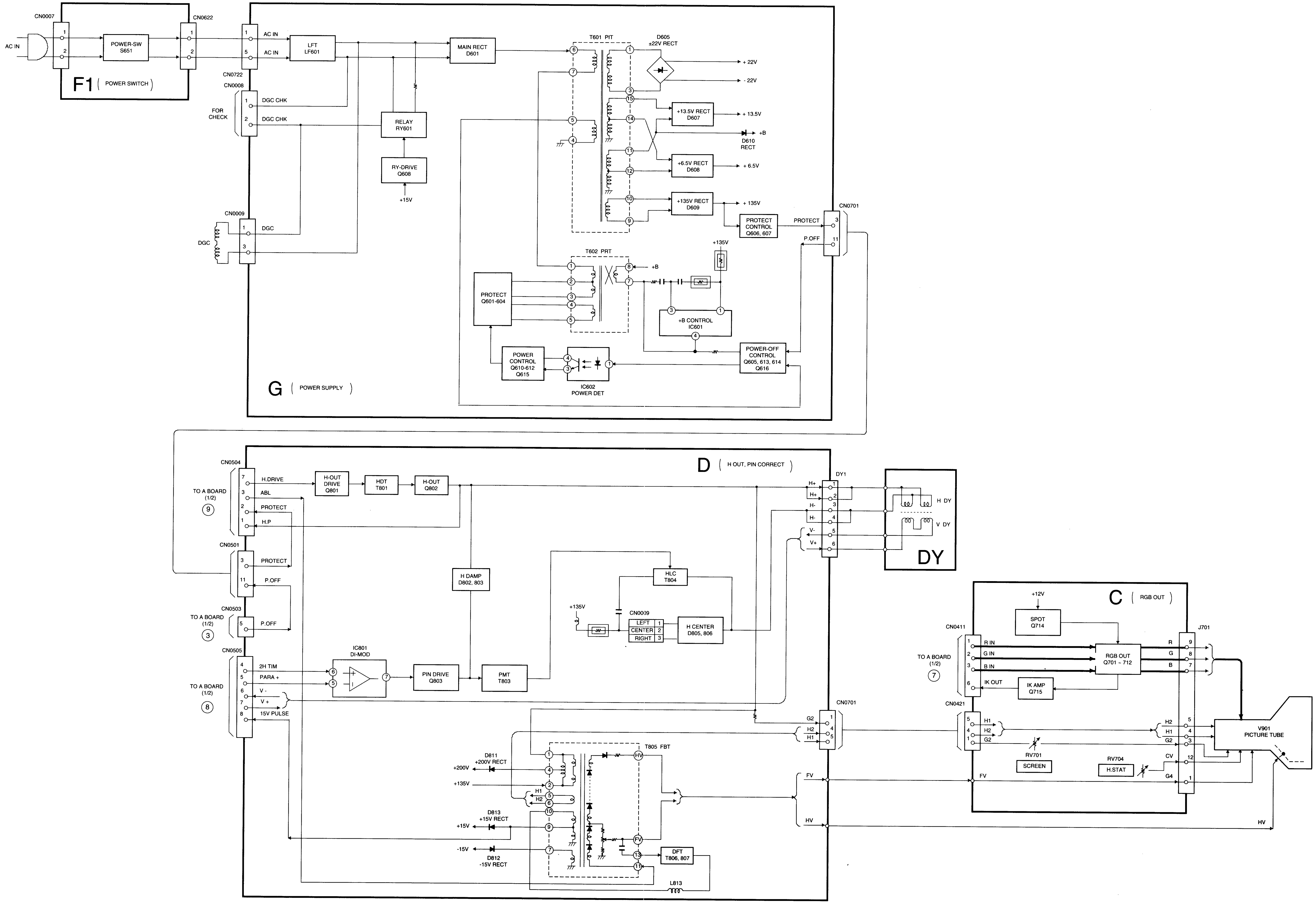

J903
J906
J907
V IN
V OUT
BLK
R
G
MODE
B
L IN
L OUT
R IN
R OUT
C IN
IC402
VIDEO AMP
V1 OUT
V2 OUT
TV IN
V2 IN
IC401
VIDEO/AUDIO SELECTOR
TV IN
AV-1 IN
AV-3 IN
AV-2 OUT
AV-2 IN
S1
S2
S3
AV-4 IN
AV-4 OUT
PIP OUT
Y IN
C IN
Y OUT
C OUT
SDA
SCL
CN0823
TO H1 BOARD
⑭
FR Y IN
FR C IN
FR V IN
FR L IN
FR Y IN
CN0806
BLK
R OUT
G OUT
B OUT
L IN
R IN
TV IN
Y IN
C IN
Y OUT
C OUT
PIP V OUT
PIP L OUT
PIP R OUT
SDA
SCL
VIDEO OUT
L OUT
R OUT
TO A BOARD (1/2)
②
J901 (Y/C OUT)
J906 (YC-4)
J904 (YC-2)
L
R
Y
C
J292
CN0807
SUR IN
CENT IN
PROT OUT
VAR R IN
VAR L IN
SP R IN
SP L IN
TO A BOARD (1/2)
①
J291
SP R OUT
CN0825
SP L OUT
CN0824
J (VIDEO/AUDIO IN/OUT, SPEAKER TERMINAL)

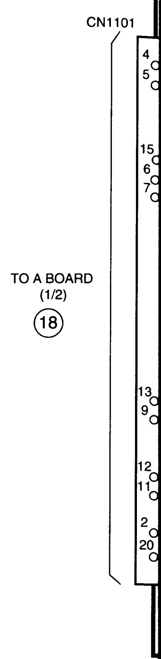
BLOCK DIAGRAM (4)

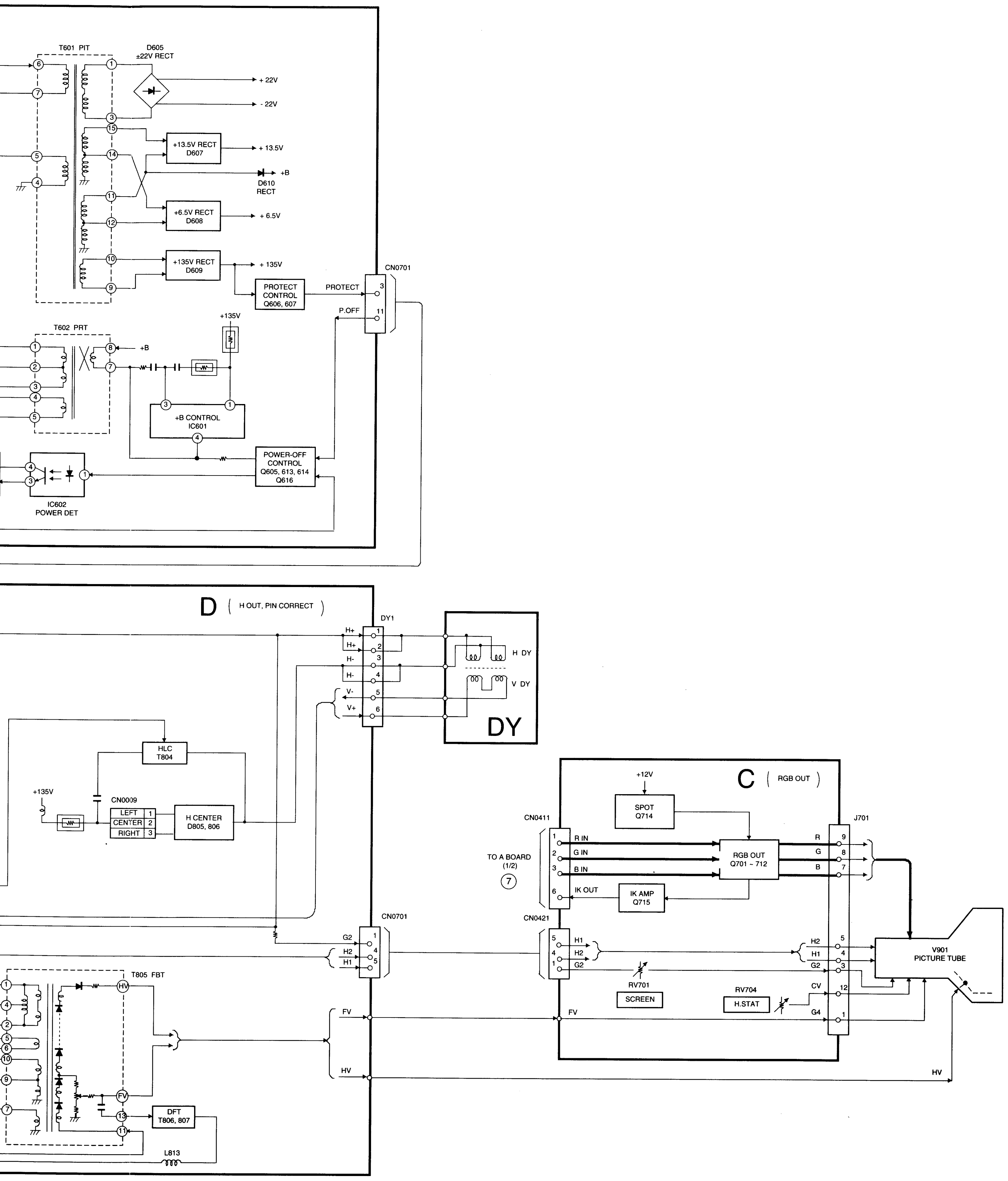

IC3501
SECAM DECODER
CVBS
SAND
IDENT
- (R - Y)
- (B - Y)
IC1302
SWITCH AND CLAMP
R - Y SEC
B - Y SEC
Y.SEC
VIDEO
Y - S
C - S
S1
S2
Y - IN
C - IN
Y - OUT
C - OUT
Y - BIAS
C - BIAS
Y - CLP
C - CLP
Y - SW
C - SW
+ 9V
BIAS CONT
Q1301, 1302
BIAS
FL1301,1302
LPF
CLAMP AND BLANKING
IC1305, Q1303, Q1306, 1307, Q1316 ~ Q1319
CN0302 (1/2)
MV IN
MY IN
MC IN
CONT 1
CONT 2
SDA
SCL
VEQ
V BLK
CLP3
50/60
2H TIM
H TIM
FF TIM
VS
IC501
BUFFER
2H, H
FF, VS
IC301
8BIT A/D CONVERTER
VIN
D0
D7
CLK
FSC4
IC302
DIGITAL COMB/CHROMA DECODER
SDA
SCL
VIN2
VIN9
ADIN
XO2
X301
17.8MHz
XI2
XO1
X302
14.3MHz
XI1
XCL1
FSC
CLP3
X56
2HH
FH
FV
YO0
YO9
CYO0
CYO9
FSC2
XFS2
FSC4
XFS4
YS
CS
THRU
IC503
10BIT D/A CONVERTER
R0
R9
G0
G9
B0
B9
BCK
GCK
RCK
RO
GO
BO
OUTPUT AMP
Q503, 507
OUTPUT AMP
Q502, 508
OUTPUT AMP
Q508, 509
FL301
Y LPF
OUTPUT AMP
Q306, 307
FL302
C LPF
OUTPUT AMP
Q306, 309
TO A BOARD
(1/2)
⑪
Y IN
RY IN
BY IN
FL353
FL355
FL352
LPF
IC504
8BIT A/D CONVERTER
AINA
AINB
AINC
A0
A7
B0
B7
C0
C7
YINMT
CINMT
3.3V
V REF
Q1401
VRB
IC1401
PICTURE IN PICTURE
YOUT0
YOUT7
CYOUT0
CYOUT5
PIP Y
PIP C
CLP1
Y
CV
SCKO1
SCKO2
SHSO
SHSI
SVS
SCLP
SCCON
SDA
SCL
CVD
CLP2
FSC
MONT2
MONT5
FMYI0
FMYI7
X1Q
X1I
X2I
X2Q
CONT
PHD
PVD
YS
DYSD
IC1403
1.2M FIELD MEMORY
DIN0
DIN3
DQ10
DQ13
X1401
14.3MHz
X1402
17.7MHz
SWITCH
IC1406
CONT4
18M CLK
VS
IC1304
SWITCH AND CLAMP
BIAS
BIAS CONT
Q1308
Y BIAS
C BIAS
VIDEO
CS
Y SEC
S1
S2
C-CLP
Y-CLP
Y OUT
C OUT
LINE-ID
SECAM
VPX
SCP
R - Y SEC
B - Y SEC
CCV
CONT3
CONT4
H SYNC GEN
IC1402, 1406
IC571
SYNC SETARATOR
HL
X571
IC1303
SECAM DECODER
CVBS
- (R - Y)
- (B - Y)
SAND
IDENT
CLAMP AND BLANKING
IC1306, Q1309, Q1312, 1313
CV SYNC
CHD
NR ON/OFF
B
DIGITAL COMB, DIGITAL NOISE REDUCER, PICTURE IN PICTURES
PED1
PED2
CLP
DACK
XDACK
IC02
ASPECT CONVERSION AND LINE FLICKER REDUCTION
YINM2
YINM9
CINM2
CINM9
YINS0
YINS7
CINS0
CINS5
SDA
SCL
HDD
YSIN
FRIN
YO2
YO9
CO2
CO9
FYO2
FYO9
FCO2
FCO5
D/A Y
D/A C
FYO
FCO
FYI2 — FYI9
YC0 — YC7
FCI2 — FCI5
FYI
YC
FCI
IC04, 05
2.4M FIELD MEMORY
DO20 — DO27
DO10 — DO17
DIN0 — DIN3
DO20 — DO23
NRY
FY
NRC
RC
IC07
DIGITAL NOISE REDUCER
YO0 — YO7
YI20 — YI27
CO0 — CO3
CI20 — CI23
KY0 — KY2
YI10 — YI17
CI10 — CI13
IC01
8BIT D/A CONVER
R0
R7
G0
G7
B0
B7
36M
DACK
XDACK
RCK
GCK
BCK
IC507
PED1
PED2
YSRC
CSRC
DOY0
DOY9
DOC0
DOC9
H
2H
VS
HI
FHI1
VS
I4FS
VCO4


IC1302
SWITCH AND CLAMP
Y - OUT
C - OUT
R - Y SEC
B - Y SEC
Y.SEC
VIDEO
Y - S
C - S
S1
S2
Y - IN
C - IN
Y - BIAS
C - BIAS
Y - CLP
C - CLP
Y - SW
C - SW
+ 9V
BIAS CONT
Q1301, 1302
BIAS
FL1301,1302
LPF
CLAMP AND BLANKING
IC1305, Q1303, Q1306, 1307, Q1316 ~ Q1319
IC501
BUFFER
2H, H
FF, VS
IC301
8BIT A/D CONVERTER
VIN
D0 ~ D7
CLK
FSC4
IC302
DIGITAL COMB/CHROMA DECODER
SDA
SCL
VIN2 ~ VIN9
ADIN
XO2
XI2
XO1
XI1
X301
17.8MHz
X302
14.3MHz
XCL1
FSC
CLP3
X56
2HH
VS
FH
FV
YO0 ~ YO9
CYO0 ~ CYO9
FSC2
XFS2
FSC4
XFS4
YS
CS
THRU
IC503
10BIT D/A CONVERTER
R0 ~ R9
G0 ~ G9
B0 ~ B9
BCK
GCK
RCK
RO
GO
BO
OUTPUT AMP
Q503, 507
OUTPUT AMP
Q502, 508
OUTPUT AMP
Q508, 509
FL301
Y LPF
FL302
C LPF
OUTPUT AMP
Q306, 307
OUTPUT AMP
Q306, 309
Y OUT
RY OUT
BY OUT
COMB Y
COMB C
CN0302
(2/2)
TO A BOARD
(1/2)
⑪
YINMT
CINMT
3.3V
V REF
Q1401
VRB
IC1401
PICTURE IN PICTURE
YOUT0 ~ YOUT7
CYOUT0 ~ CYOUT5
PIP Y
PIP C
CLP1
Y
CV
SCKO1
SCKO2
SHSO
SHSI
H SYNC GEN
IC1402, 1406
18M CLK
SVS
SCLP
SCCON
SDA
SCL
CVD
CLP2
FSC
MONT2 ~ MONT5
FMYI0 ~ FMYI7
X1Q
X1I
X2I
X2Q
CONT
PHD
PVD
YS
DYSD
IC1403
1.2M FIELD MEMORY
DIN0 ~ DIN3
DQ10 ~ DQ13
X1401
14.3MHz
X1402
17.7MHz
SWITCH
IC1406
CONT4
IC571
C SETARATOR
HL
X571
IC02
ASPECT CONVERSION AND LINE FLICKER REDUCTION
YINM2 ~ YINM9
CINM2 ~ CINM9
YINS0 ~ YINS7
CINS0 ~ CINS5
HDD
YSIN
FRIN
PED1
PED2
CLP
DACK
XDACK
YO2 ~ YO9
CO2 ~ CO9
FYO2 ~ FYO9
FCO2 ~ FCO5
D/A Y
D/A C
FYO
FCO
FYI2 — FYI9
YC0 — YC7
FCI2 — FCI5
FYI
YC
FCI
IC04, 05
2.4M FIELD MEMORY
DO20 — DO27
DO10 — DO17
DIN0 — DIN3
DO20 — DO23
NRY
FY
NRC
RC
IC07
DIGITAL NOISE REDUCER
YO0 — YO7
YI20 — YI27
CO0 — CO3
CI20 — CI23
KY0 — KY2
YI10 — YI17
CI10 — CI13
IC01
8BIT D/A CONVERTER
R0 ~ R7
G0 ~ G7
B0 ~ B7
RCK
GCK
BCK
36M
DACK
XDACK
FL01
FL02
FL03
LPF
Y OUTPUT AMP
Q01
R - Y OUTPUT AMP
Q02
B - Y OUTPUT AMP
Q03
Y1
RY1
BY1
IC507
PED1
PED2
CLPW1
VIDEO-PLL
IC502
SAMPLING RATE CONVERTER
YSRC
CSRC
DOY0 ~ DOY9
DOC0 ~ DOC9
HI
FHI1
VS
I4FS
VCO4
H
2H
VS
VC2
DIY2 ~ DIY9
DCYO2 ~ DCYO9
I2FS
PC41
PC42
F360
O18M
CKI1
I18R
CKI2
BUFFER
IC505
IC506
18M
36M

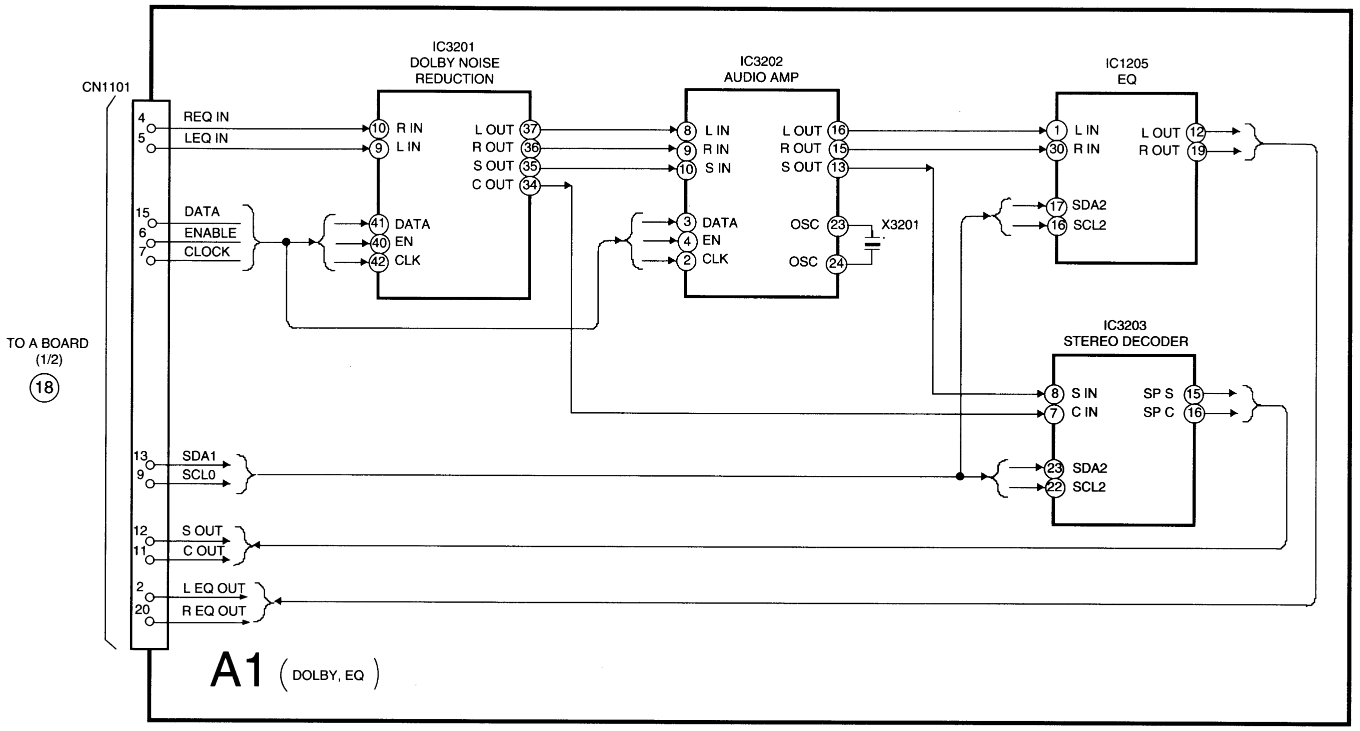
BLOCK DIAGRAM (5)


CN0007
AC IN
POWER-SW
S651
CN0622
F1 (POWER SWITCH)
AC IN
AC IN
LFT
LF601
MAIN RECT
D601
T601 PIT
D605
±22V RECT
+ 22V
- 22V
CN0722
CN0008
FOR CHECK
DGC CHK
DGC CHK
RELAY
RY601
RY-DRIVE
Q608
+15V
+13.5V RECT
D607
+ 13.5V
+B
D610
RECT
+6.5V RECT
D608
+ 6.5V
+135V RECT
D609
+ 135V
PROTECT
CONTROL
Q606, 607
PROTECT
P.OFF
CN0701
CN0009
DGC
DGC
+135V
T602 PRT
+B
PROTECT
Q601-604
+B CONTROL
IC601
POWER
CONTROL
Q610-612
Q615
IC602
POWER DET
POWER-OFF
CONTROL
Q605, 613, 614
Q616
G (POWER SUPPLY)
CN0504
TO A BOARD
(1/2)
⑨
H.DRIVE
ABL
PROTECT
H.P
H-OUT
DRIVE
Q801
HDT
T801
H-OUT
Q802
D (H OUT, PIN CORRECT)
DY1
H+
H+
H-
H-
V-
V+
H DY
V DY
DY
CN0501
PROTECT
P.OFF
CN0503
TO A BOARD
(1/2)
③
P.OFF
H DAMP
D802, 803
HLC
T804
+135V
CN0009
LEFT
CENTER
RIGHT
H CENTER
D805, 806
CN0505
TO A BOARD
(1/2)
⑧
2H TIM
PARA +
V -
V +
15V PULSE
IC801
DI-MOD
PIN DRIVE
Q803
PMT
T803
CN0701
G2
H2
H1
D811
+200V RECT
+200V
+135V
H1
H2
T805 FBT
HV
D813
+15V RECT
+15V
-15V
D812
-15V RECT
FV
DFT
T806, 807
L813
FV
HV
C (RGB OUT)
+12V
SPOT
Q714
CN0411
TO A BOARD
(1/2)
⑦
R IN
G IN
B IN
IK OUT
RGB OUT
Q701 ~ 712
IK AMP
Q715
J701
R
G
B
CN0421
H1
H2
G2
RV701
SCREEN
RV704
H.STAT
H2
H1
G2
CV
G4
FV
V901
PICTURE TUBE
HV

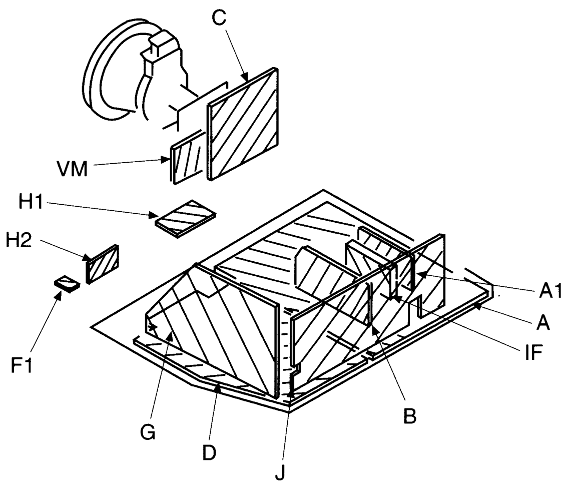

CN1101
TO A BOARD
(1/2)
⑱


T601 PIT
D605
±22V RECT
+ 22V
- 22V
+13.5V RECT
D607
+ 13.5V
+B
D610
RECT
+6.5V RECT
D608
+ 6.5V
+135V RECT
D609
+ 135V
PROTECT
CONTROL
Q606, 607
PROTECT
P.OFF
CN0701
T602 PRT
+135V
+B
+B CONTROL
IC601
POWER-OFF
CONTROL
Q605, 613, 614
Q616
IC602
POWER DET
D
H OUT, PIN CORRECT
DY1
H+
H+
H-
H-
V-
V+
H DY
V DY
DY
HLC
T804
+135V
CN0009
LEFT
CENTER
RIGHT
H CENTER
D805, 806
CN0701
G2
H2
H1
T805 FBT
HV
FV
DFT
T806, 807
L813
FV
HV
C
RGB OUT
+12V
SPOT
Q714
CN0411
R IN
G IN
B IN
IK OUT
TO A BOARD
(1/2)
⑦
RGB OUT
Q701 - 712
IK AMP
Q715
J701
R
G
B
CN0421
H1
H2
G2
RV701
SCREEN
RV704
H.STAT
H2
H1
G2
CV
G4
V901
PICTURE TUBE
FV
HV

BLOCK DIAGRAM (6)


CN1101
REQ IN
LEQ IN
DATA
ENABLE
CLOCK
SDA1
SCLO
S OUT
C OUT
L EQ OUT
R EQ OUT
TO A BOARD
(1/2)
⑱
IC3201
DOLBY NOISE
REDUCTION
R IN
L IN
DATA
EN
CLK
L OUT
R OUT
S OUT
C OUT
IC3202
AUDIO AMP
L IN
R IN
S IN
DATA
EN
CLK
L OUT
R OUT
S OUT
OSC
OSC
X3201
IC1205
EQ
L IN
R IN
SDA2
SCL2
L OUT
R OUT
IC3203
STEREO DECODER
S IN
C IN
SDA2
SCL2
SP S
SP C
A1
DOLBY, EQ

5-2. CIRCUIT BOARDS LOCATION


C
VM
H1
H2
F1
G
D
J
B
IF
A
A1

5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms. kΩ = 1000Ω , MΩ = 1000KΩ
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5 mm
Rating electrical power ¼ W

- -/\/\/- : nonflammable resistor.
- △ : internal component.
- ▭ : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ⊥ : earth - ground.
- ⏚ : earth - chassis.
- ╪ : no mounted.

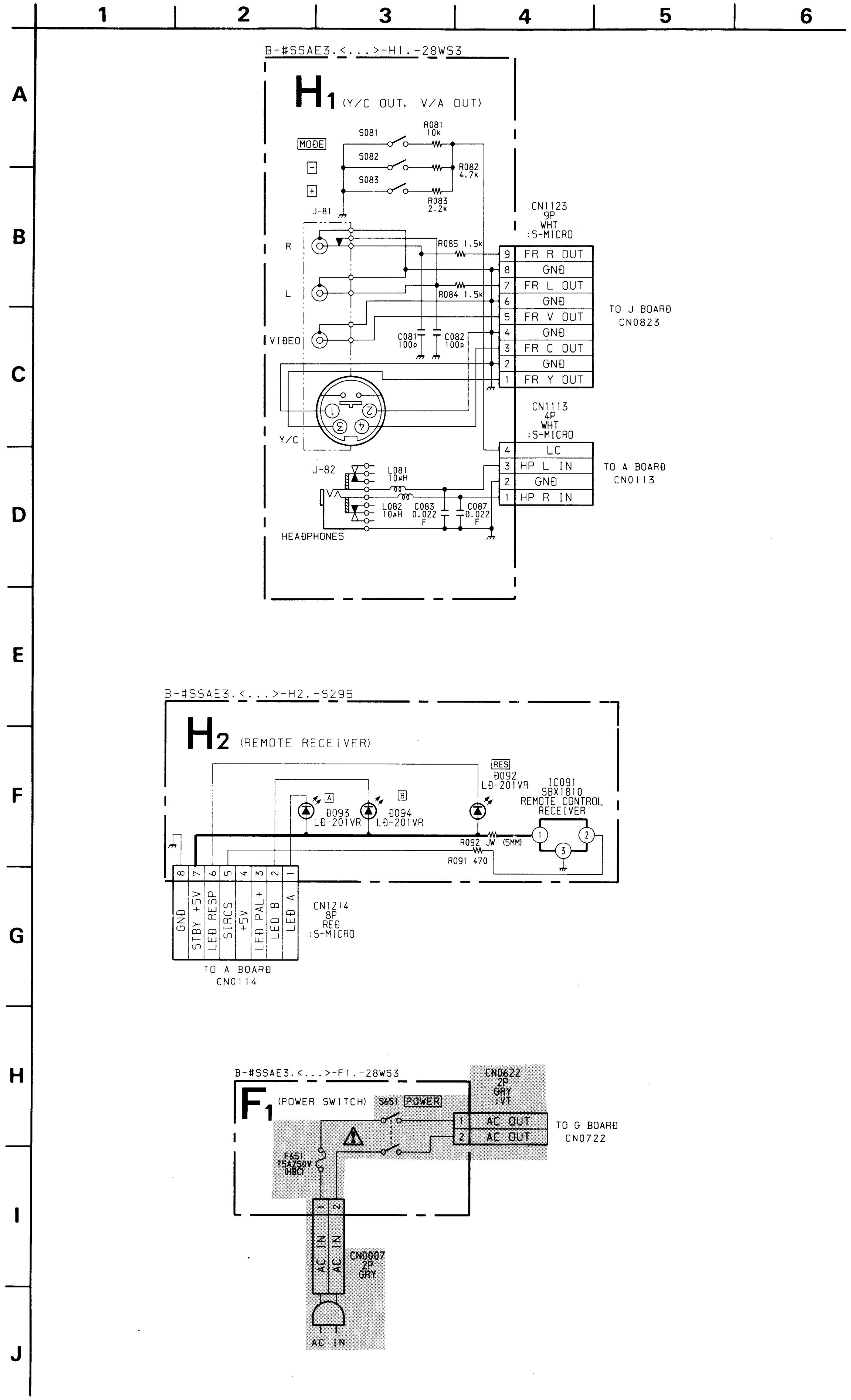
Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part number specified.

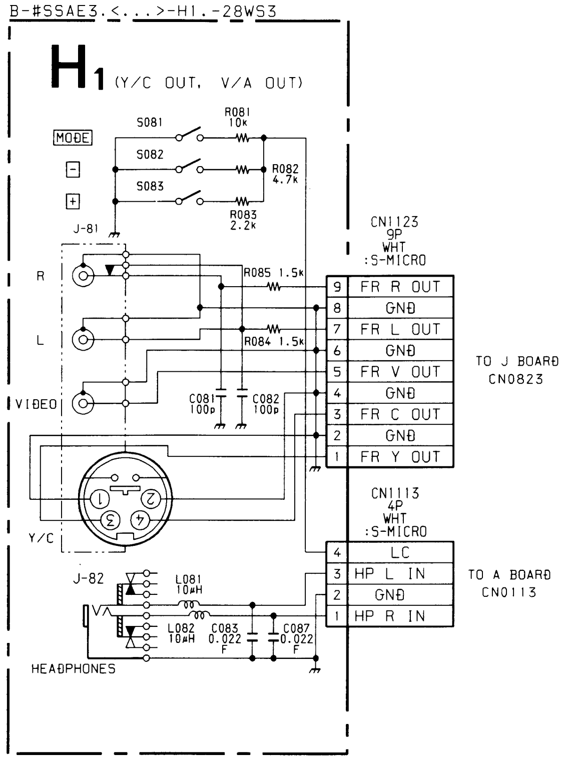
Note : Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

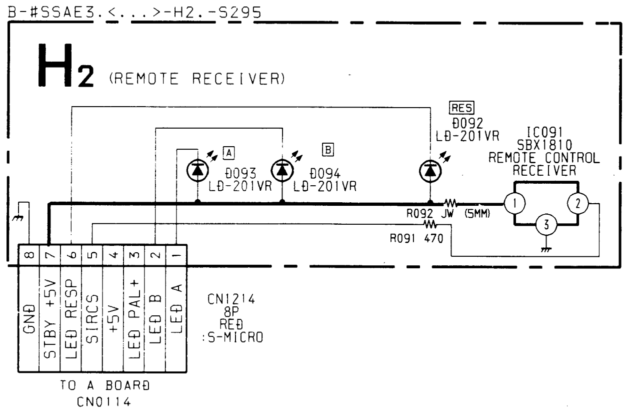
Reference information

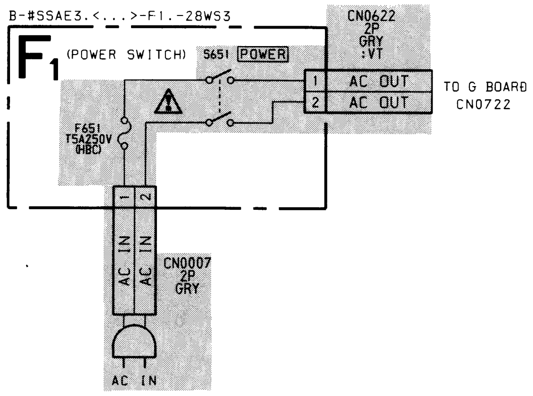
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: ✕	ADJUSTABLE RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

- Readings are taken with a colour-bar signal input.
- Readings are taken with 10MΩ digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- Circled numbers are waveform references.
- ━━ : B+ bus.
- : signal path. (RF)


1
2
3
4
5
6
A
B
C
D
E
F
G
H
I
J
B-#SSAE3.<...>-H1.-28WS3
H1 (Y/C OUT, V/A OUT)
MODE
−
+
S081
S082
S083
R081 10k
R082 4.7k
R083 2.2k
J-81
R
L
VIDEO
Y/C
R085 1.5k
R084 1.5k
C081 100p
C082 100p
CN1123 9P WHT :S-MICRO
9 FR R OUT
8 GND
7 FR L OUT
6 GND
5 FR V OUT
4 GND
3 FR C OUT
2 GND
1 FR Y OUT
TO J BOARD CN0823
CN1113 4P WHT :S-MICRO
4 LC
3 HP L IN
2 GND
1 HP R IN
TO A BOARD CN0113
J-82
L081 10μH
L082 10μH
C083 0.022 F
C087 0.022 F
HEADPHONES
B-#SSAE3.<...>-H2.-S295
H2 (REMOTE RECEIVER)
RES
D092 LD-201VR
A
D093 LD-201VR
B
D094 LD-201VR
IC091 SBX1810 REMOTE CONTROL RECEIVER
R092 JW (5MM)
R091 470
8 GND
7 STBY +5V
6 LED RESP
5 SIRCS
4 +5V
3 LED PAL+
2 LED B
1 LED A
CN1214 8P RED :S-MICRO
TO A BOARD CN0114
B-#SSAE3.<...>-F1.-28WS3
F1 (POWER SWITCH)
S651 POWER
F651 T5A250V (HBC)
CN0622 2P GRY :VT
1 AC OUT
2 AC OUT
TO G BOARD CN0722
1 AC IN
2 AC IN
CN0007 2P GRY
AC IN

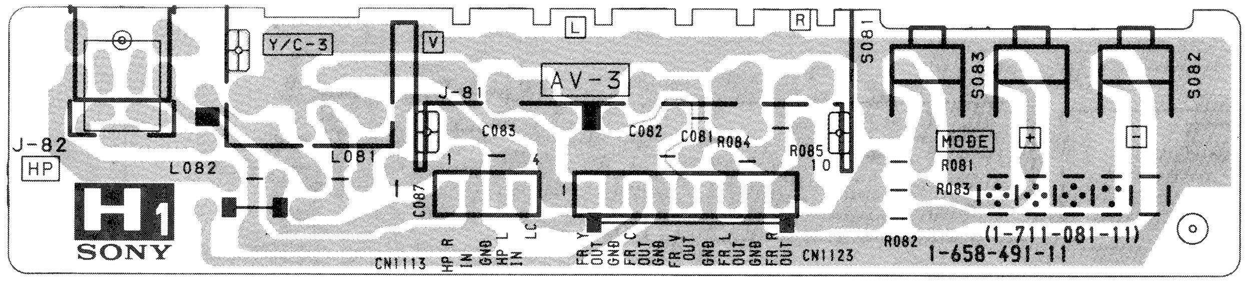

B-#SSAE3.<...>-H1.-28WS3
H1 (Y/C OUT, V/A OUT)
MODE
S081
S082
S083
R081 10k
R082 4.7k
R083 2.2k
J-81
R
L
VIDEO
Y/C
R085 1.5k
R084 1.5k
C081 100p
C082 100p
CN1123 9P WHT :S-MICRO
9 FR R OUT
8 GND
7 FR L OUT
6 GND
5 FR V OUT
4 GND
3 FR C OUT
2 GND
1 FR Y OUT
TO J BOARD CN0823
CN1113 4P WHT :S-MICRO
4 LC
3 HP L IN
2 GND
1 HP R IN
TO A BOARD CN0113
J-82
L081 10μH
L082 10μH
C083 0.022 F
C087 0.022 F
HEADPHONES


B-#SSAE3.<...>-H2.-S295
H2 (REMOTE RECEIVER)
RES
D092 LD-201VR
A
B
D093 LD-201VR
D094 LD-201VR
IC091 SBX1810 REMOTE CONTROL RECEIVER
R092 JW (5MM)
R091 470
8 GND
7 STBY +5V
6 LED RESP
5 SIRCS
4 +5V
3 LED PAL+
2 LED B
1 LED A
CN1214 8P RED :S-MICRO
TO A BOARD CN0114

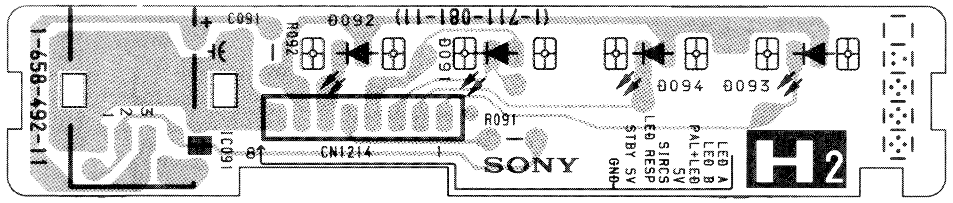

B-#SSAE3.<...>-F1.-28WS3
F1 (POWER SWITCH)
S651 POWER
CN0622 2P GRY :VT
1 AC OUT
2 AC OUT
TO G BOARD CN0722
F651 T5A250V GHBC
1 AC IN
2 AC IN
CN0007 2P GRY
AC IN

H1 [Y/C OUT, V/A OUT] H2 [REMOTE RECEIVER] F1 [POWER SWITCH] VM [VM AMP, QP]

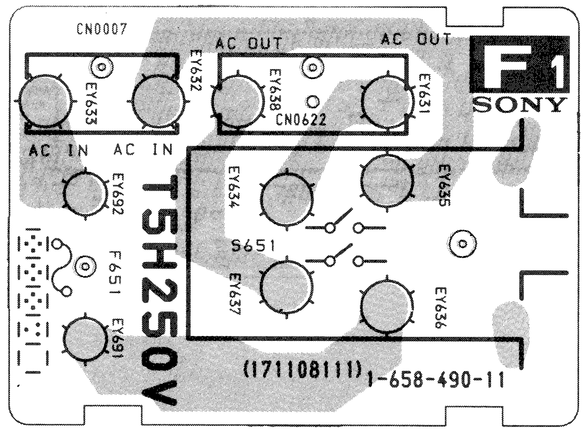
— H1 Board —


Y/C-3
V
L
R
AV-3
J-81
J-82
HP
L082
L081
C083
C082
C081
R084
R085
C087
CN1113
CN1123
S081
S083
S082
MODE
R081
R083
R082
(1-711-081-11)
1-658-491-11
H1
SONY

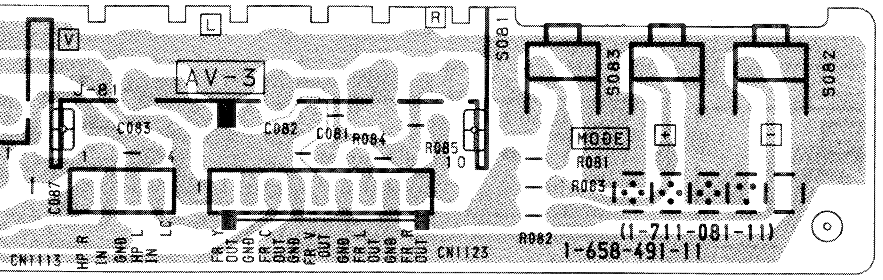
— H2 Board —

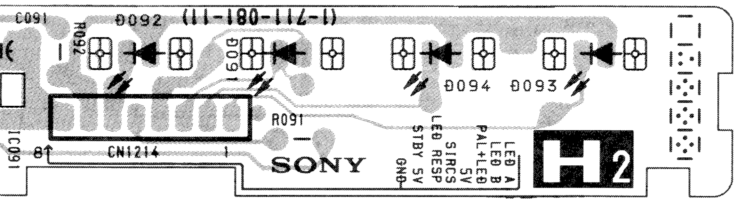

C091
D092
(1-711-081-11)
R092
D091
IC091
D094
D093
R091
CN1214
1-658-492-11
LED A
LED B
PAL+LED
5V
SIRCS
LED RESP
STBY 5V
GND
SONY
H2

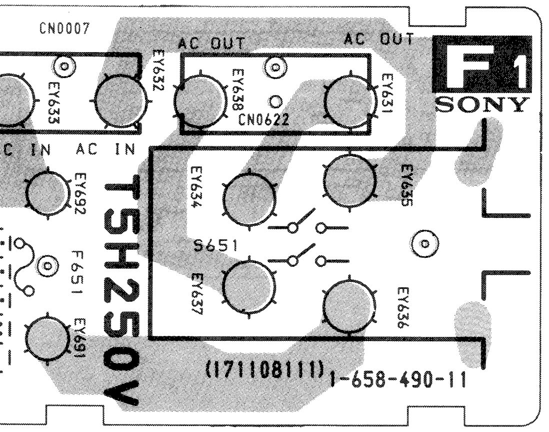
— F1 Board —


CN0007
AC OUT
AC OUT
EY632
EY633
EY638
EY631
CN0622
AC IN
AC IN
EY692
EY634
EY635
S651
F651
EY637
EY636
EY691
T5H250V
(171108111)
1-658-490-11
F1
SONY

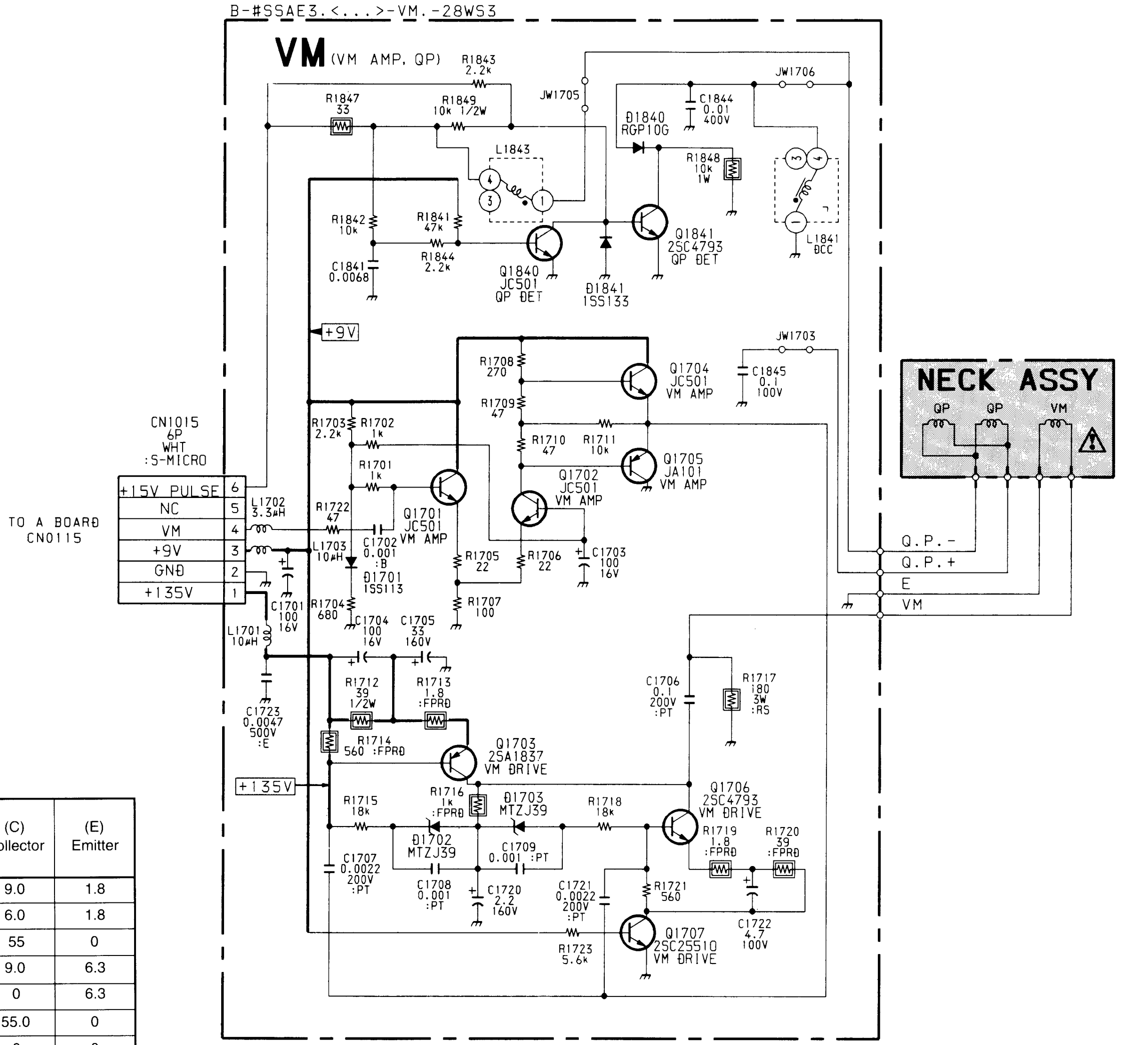
2 [REMOTE RECEIVER] F1 [POWER SWITCH] VM [VM AMP, QP]


J-81
AV-3
C083
C082
C081
R084
R085
S081
S083
S082
MODE
R081
R083
R082
C087
CN1113
CN1123
(1-711-081-11)
1-658-491-11

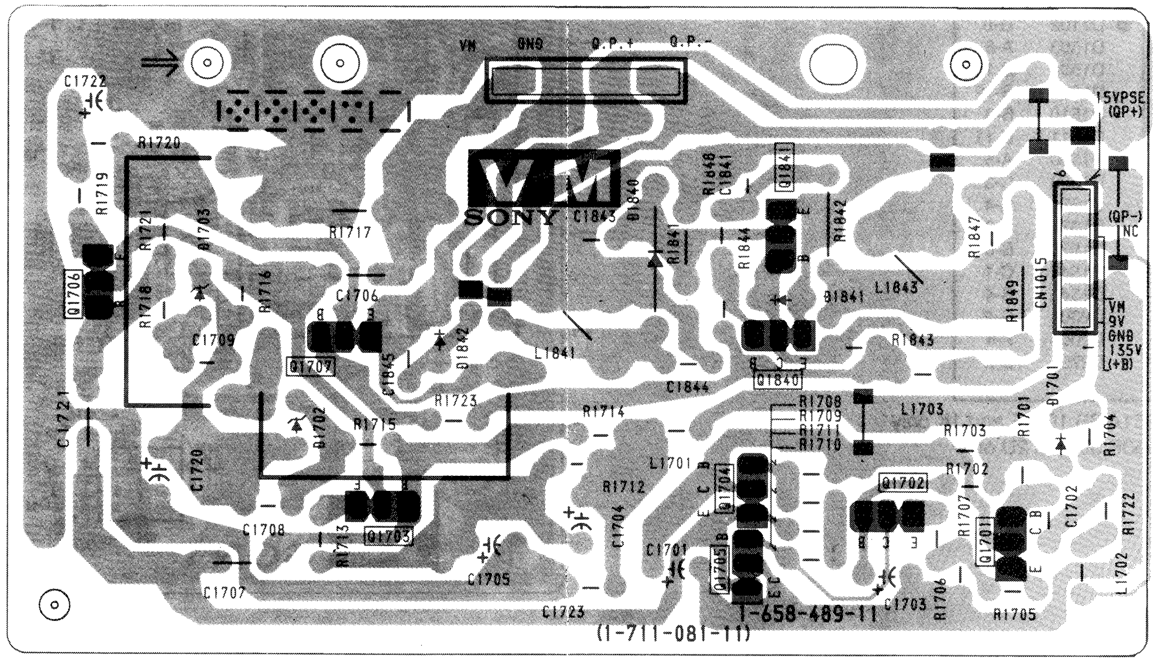

C091
D092
(1-711-081-11)
D094
D093
R091
CN1214
SONY
H2


CN0007
AC OUT
AC OUT
CN0622
AC IN
EY632
EY633
EY638
EY631
EY634
EY635
EY692
S651
F651
EY637
EY636
EY691
T5H250V
(171108111)
1-658-490-11
F1
SONY

— F1 Board —


B-#SSAE3.<...>-VM.-28WS3
VM (VM AMP, QP)
R1843 2.2k
R1847 33
R1849 10k 1/2W
JW1705
D1840 RGP10G
C1844 0.01 400V
JW1706
R1848 10k 1W
L1843
R1842 10k
R1841 47k
R1844 2.2k
C1841 0.0068
Q1840 JC501 QP DET
D1841 1SS133
Q1841 2SC4793 QP DET
L1841 BCC
+9V
R1708 270
R1709 47
Q1704 JC501 VM AMP
JW1703
C1845 0.1 100V
NECK ASSY
QP
QP
VM
R1703 2.2k
R1702 1k
R1710 47
R1711 10k
Q1705 JA101 VM AMP
R1701 1k
Q1702 JC501 VM AMP
CN1015 6P WHT :S-MICRO
+15V PULSE 6
NC 5
VM 4
+9V 3
GND 2
+135V 1
TO A BOARD CN0115
L1702 3.3µH
R1722 47
Q1701 JC501 VM AMP
L1703 10µH
C1702 0.001 :B
D1701 1SS113
R1705 22
R1706 22
C1703 100 16V
C1701 100 16V
R1704 680
C1704 100 16V
C1705 33 160V
R1707 100
L1701 10µH
Q.P.-
Q.P.+
E
VM
C1706 0.1 200V :PT
R1717 180 3W :RS
C1723 0.0047 500V :E
R1712 39 1/2W
R1713 1.8 :FPRD
R1714 560 :FPRD
Q1703 2SA1837 VM DRIVE
+135V
R1715 18k
R1716 1k :FPRD
D1703 MTZJ39
R1718 18k
Q1706 2SC4793 VM DRIVE
D1702 MTZJ39
C1709 0.001 :PT
R1719 1.8 :FPRD
R1720 39 :FPRD
C1707 0.0022 200V :PT
C1708 0.001 :PT
C1720 2.2 160V
C1721 0.0022 200V :PT
R1721 560
C1722 4.7 100V
R1723 5.6k
Q1707 2SC2551O VM DRIVE

Pin No. Ref.No.	(B) Base	(C) Collector	(E) Emitter
Q1701	2.5	9.0	1.8
Q1702	2.5	6.0	1.8
Q1703	135.0	55	0
Q1704	6.7	9.0	6.3
Q1705	6.0	0	6.3
Q1706	0.6	55.0	0
Q1707	0.7	0	0
Q1840	0	0	0
Q1841	0	0.2	0


VM
GND
Q.P.+
Q.P.-
15VPSE (QP+)
(QP-) NC
VM 9V GND 135V (+B)
CN1015
C1722
R1720
R1719
R1721
R1718
R1716
Q1706
C1709
C1706
R1717
Q1707
D1842
C1845
R1723
R1715
C1720
C1721
C1708
R1713
Q1703
C1707
C1705
C1723
VM SONY
C1843
D1840
R1848
C1841
Q1841
R1842
R1844
D1841
L1841
C1844
Q1840
R1847
R1849
L1843
R1843
R1714
R1712
L1701
C1704
C1701
Q1705
Q1704
R1708 R1709 R1711 R1710
L1703
Q1702
R1703
R1702
R1707
Q1701
D1701
R1701
R1704
C1702
R1722
L1702
R1706
C1703
R1705
1-658-489-11
(1-711-081-11)

— VM Board —

A BOARD

	IC	
	IC001	F-23
	IC002	F-1
	IC072	F-2
	IC201	H-21
	IC202	H-3
	IC251	H-8
	IC261	H-10
	IC351	D-11
	IC572	D-20
	IC681	A-5
	IC682	A-7
	IC683	B-7
	IC684	B-7
	IC685	B-1
	IC1001	D-23
	IC1101	H-19
	IC1501	A-9
	IC1531	C-4
	IC2001	G-3
	IC2002	G-24
	IC2003	H-1
	IC2701	B-2

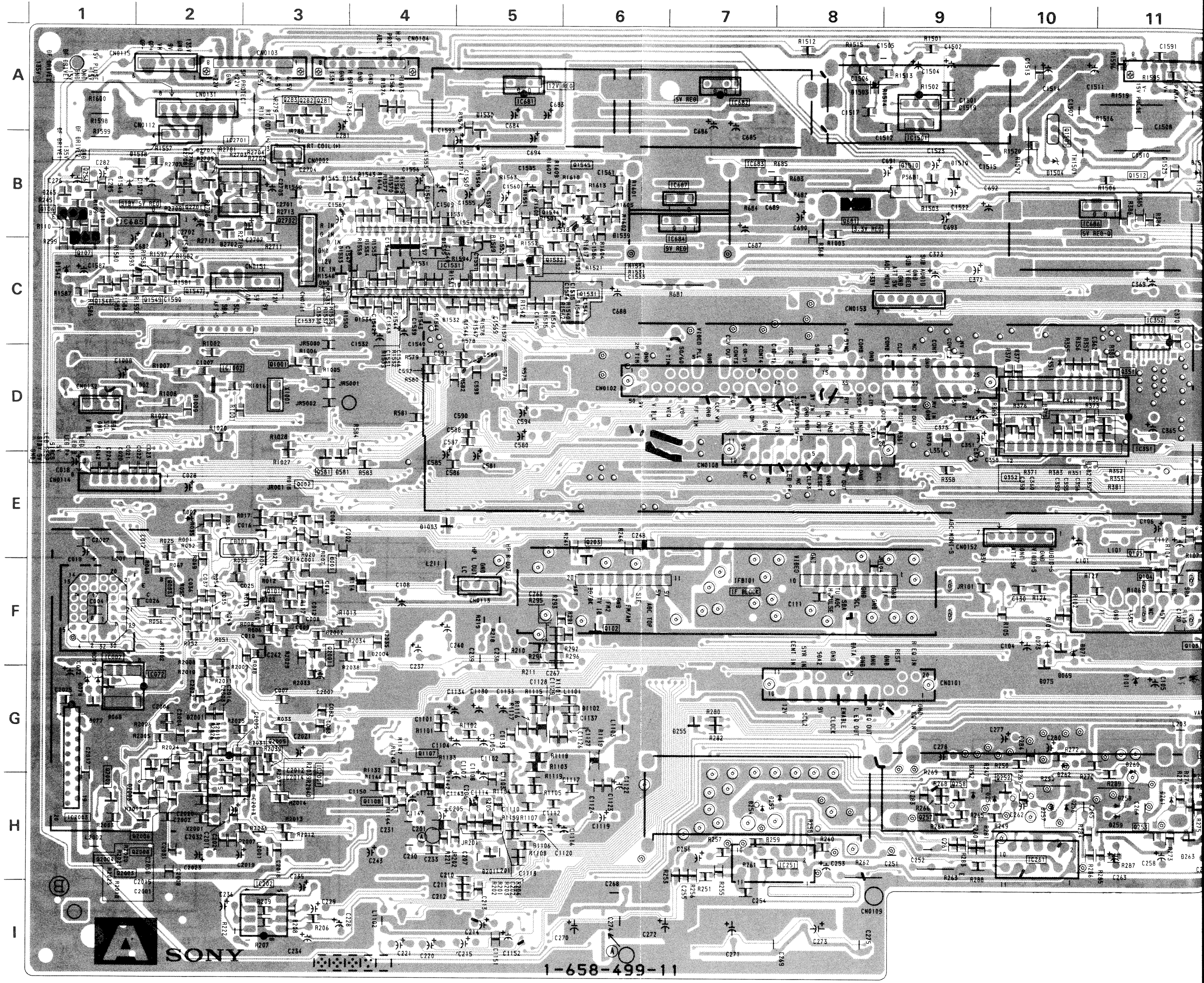
	TRANSISTOR	
	Q002	E-3
	Q005	E-23
	Q006	E-22
	Q007	E-22
	Q008	E-22
	Q102	F-6
	Q103	F-12
	Q106	B-1
	Q107	C-1
○	Q203	E-6
	Q252	G-10
	Q253	H-11
	Q254	H-12
	Q255	G-12
	Q256	B-1
	Q257	H-9
	Q258	G-9
	Q259	H-11
	Q260	G-3
	Q281	A-3
	Q282	A-3
	Q351	D-11
	Q352	E-10
	Q371	G-3
	Q381	G-3
	Q681	B-8
	Q1001	D-3
●	Q1105	H-20
●	Q1106	I-20
●	Q1107	G-4
●	Q1108	H-4
	Q1505	B-10
	Q1506	B-12
	Q1507	A-12
	Q1508	A-12
	Q1510	B-9
	Q1511	B-14
	Q1512	B-11
	Q1531	C-6
	Q1532	C-5
	Q1533	C-20
	Q1544	B-5
	Q1545	B-6
	Q1547	C-2
	Q1548	C-1
	Q1549	C-2
	Q2001	F-3
	Q2002	G-1
	Q2004	H-1
	Q2005	G-3
	Q2006	H-2
	Q2008	H-2
	Q2701	B-2

	DIODE	
	D001	E-3
	D003	E-23
	D068	F-5
	D069	F-10
	D071	F-10
	D073	F-10
	D075	F-10
	D077	G-1
	D078	G-1
	D079	F-1
	D101	F-11
	D201	H-5
	D251	H-9
○	D252	G-9
	D253	H-7
	D254	H-7
	D255	G-7
	D256	H-10
	D257	H-10
	D258	H-11
	D259	H-11
	D260	G-11
	D261	H-11
	D262	G-10
	D263	H-11
	D264	F-5
	D351	D-10
	D581	F-5
	D1001	F-5
	D1002	D-23
	D1003	E-4
●	D1101	G-19
●	D1102	G-6
	D1503	A-8
	D1504	B-10
	D1505	B-12
	D1510	B-9
	D1511	B-11
	D1530	A-5
	D1533	C-3
	D1534	C-4
	D1536	A-21
	D1539	B-6
	D1542	C-1
	D1543	B-4
	D2001	G-2
	D2004	F-4
	D2701	B-2

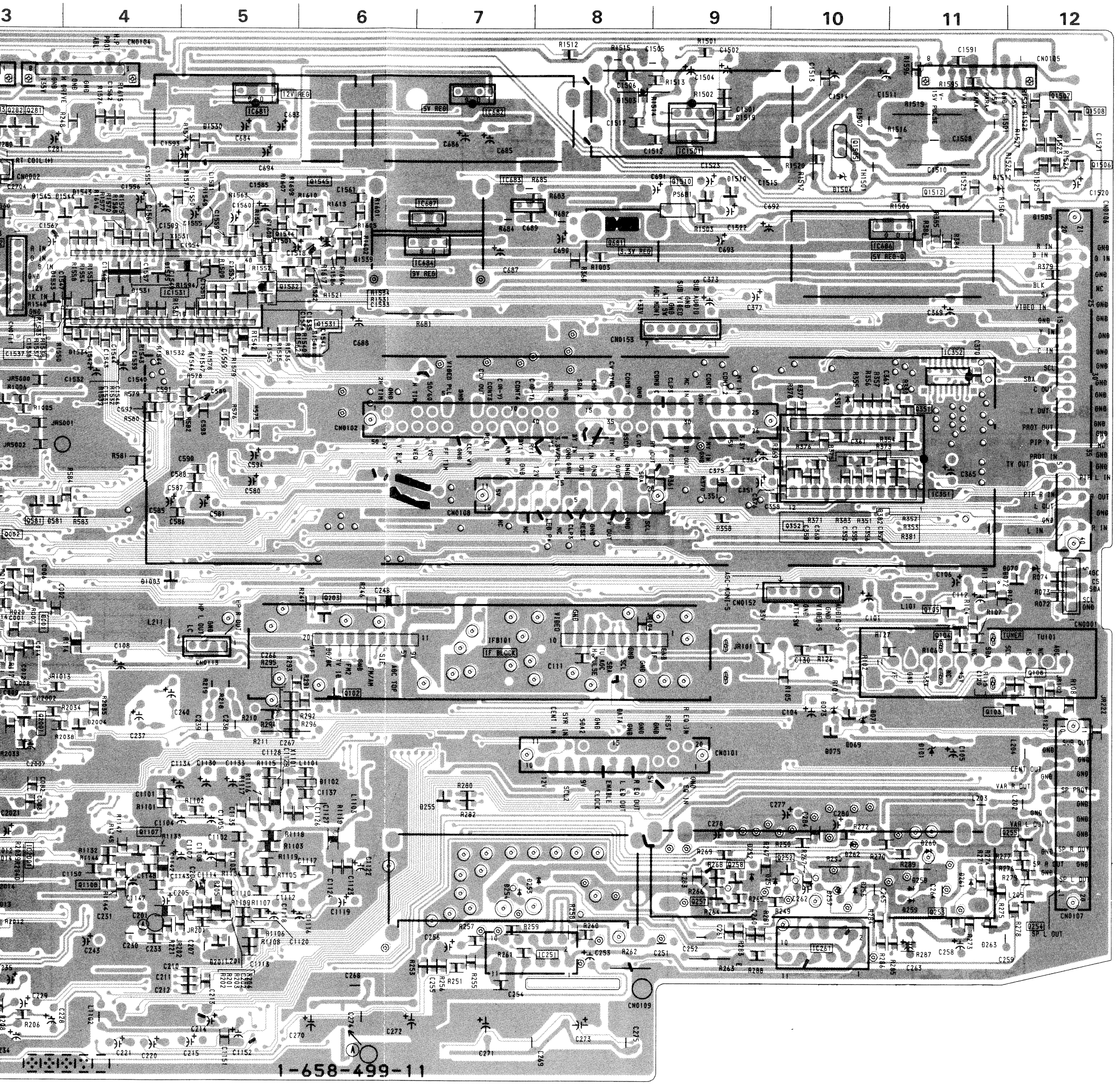
○ mark : KV-S2951A,3B,1D,3E and 1K only
● mark : KV-S2953B,3E and 2U only

A [RGB DECODER, CRT DRIVER, NICAM DECODER, MEGA TEXT, MICRO CONTROLLER]

— A Board — <Conductor Side>



DECODER,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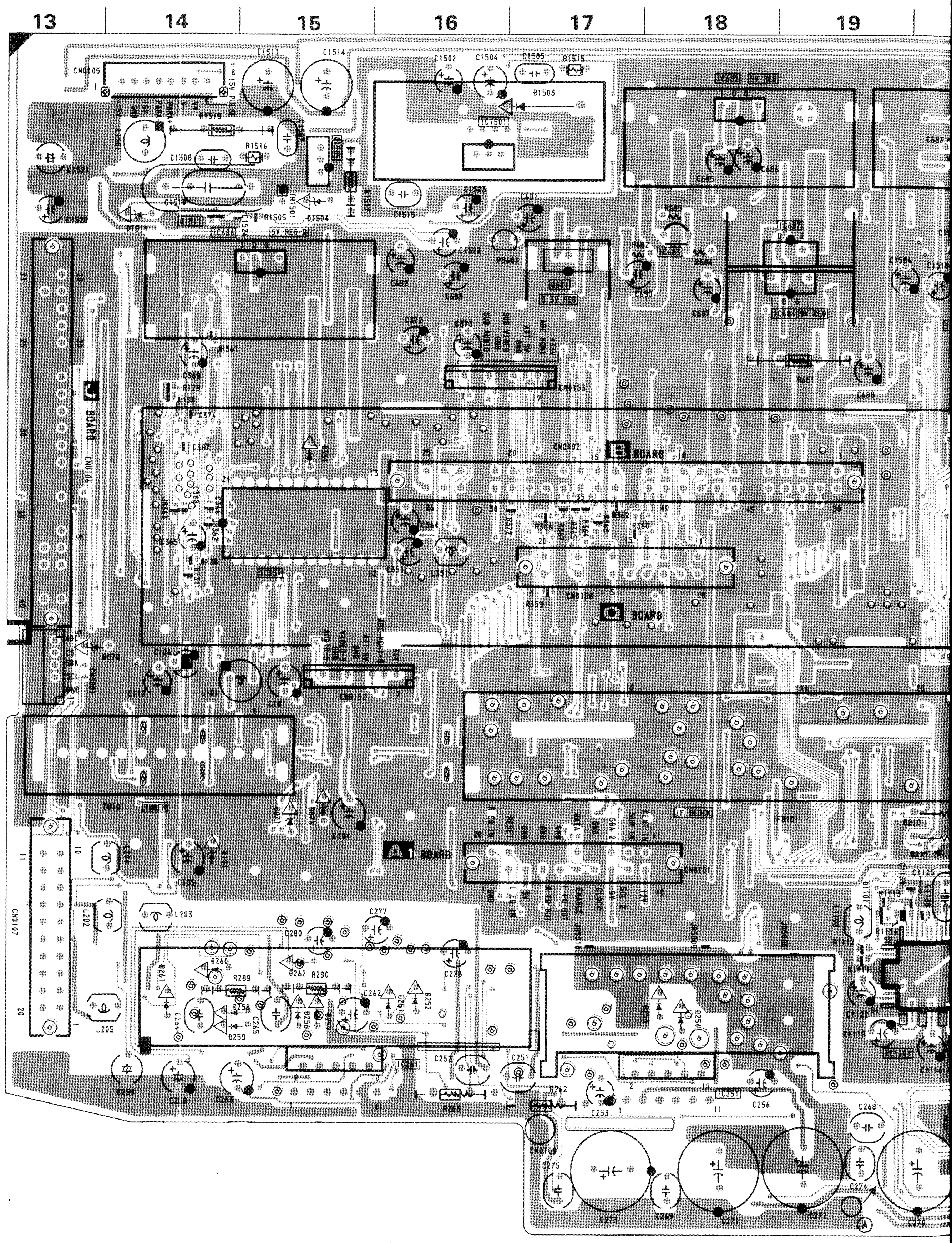
CN0102
CN0108
CN0101
CN0107
CN0109
IF BLOCK
TUNER
TU101
1-658-499-11

— A Board — <Component Side>


13
14
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17
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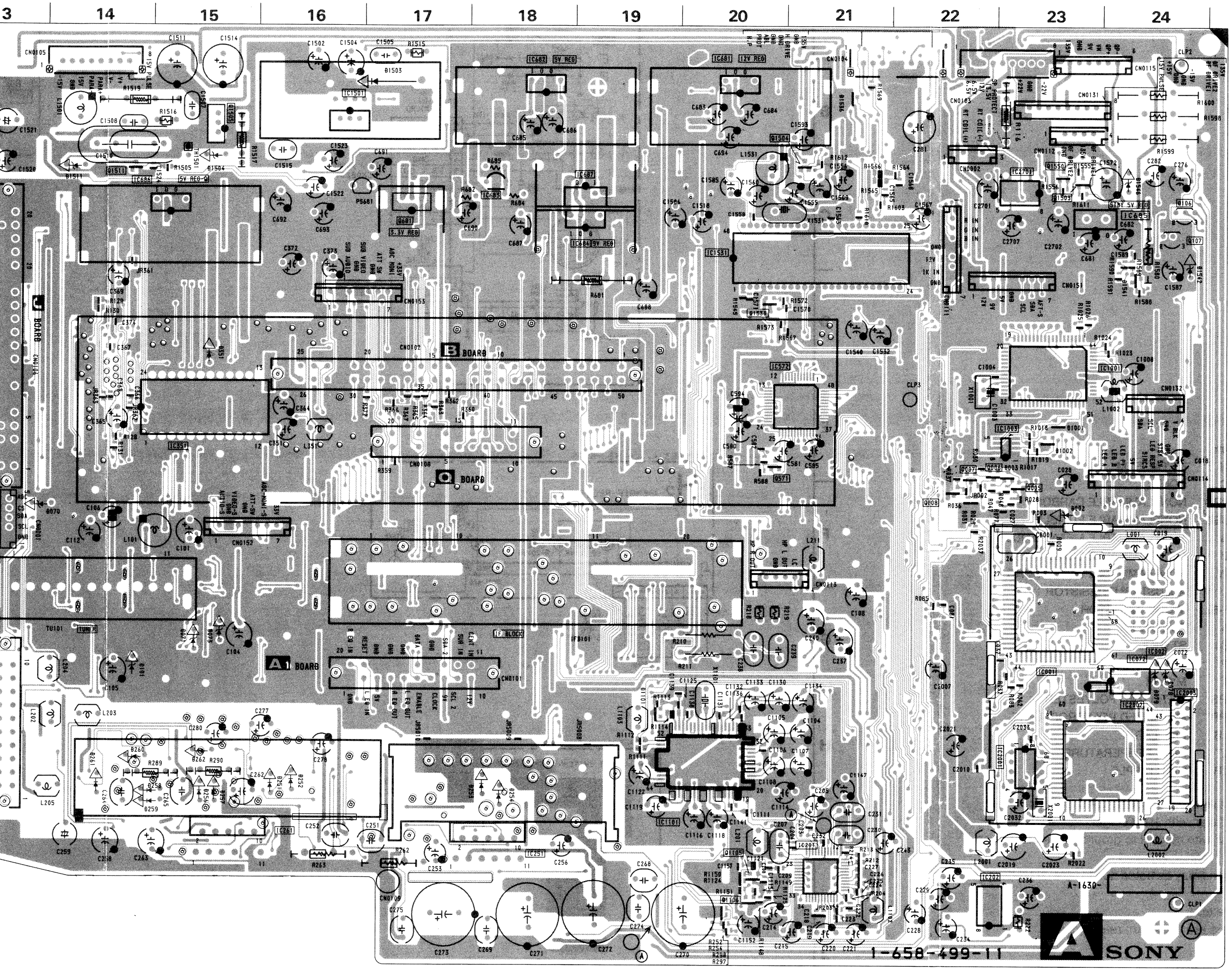
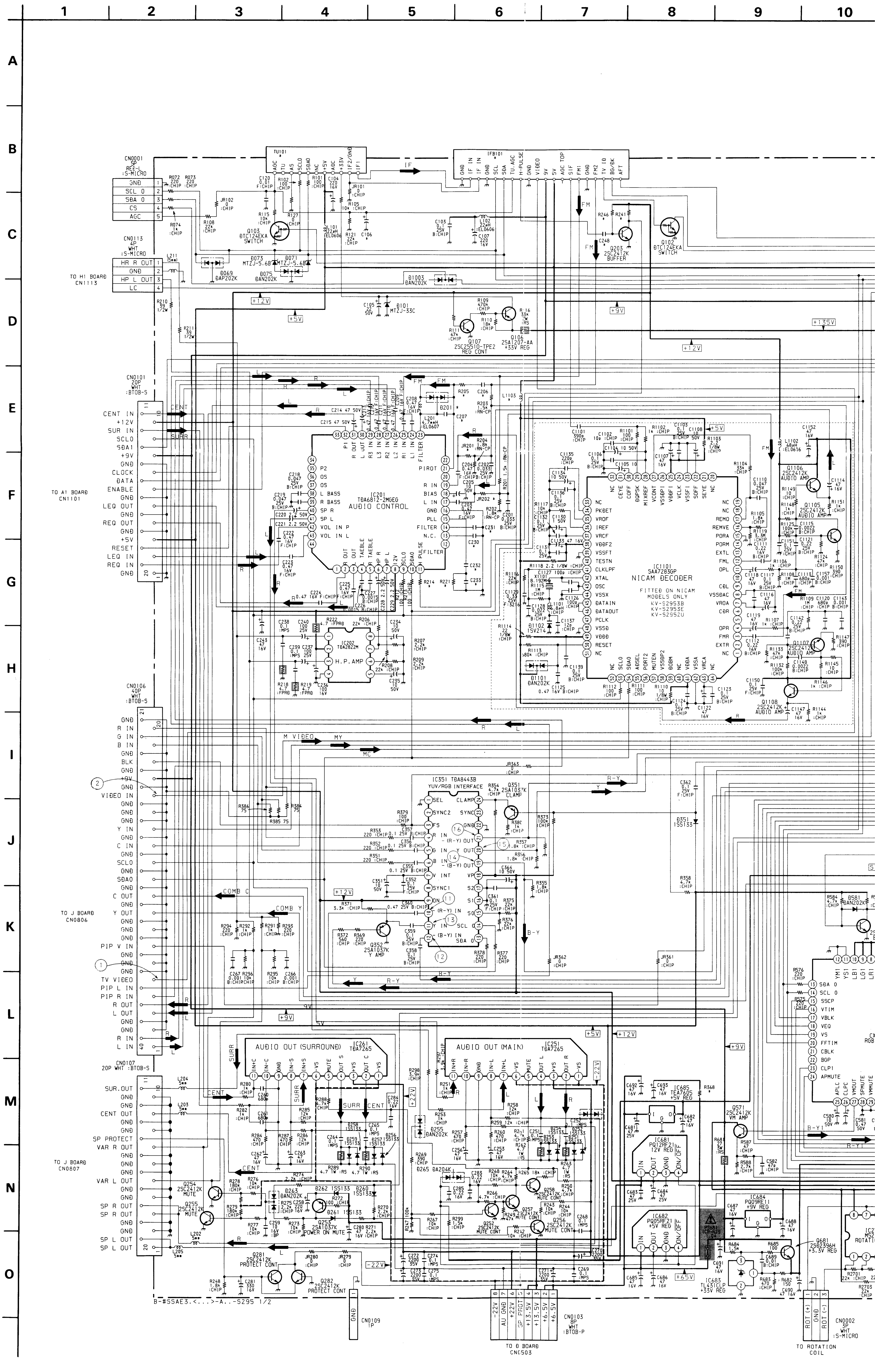
19
J BOARD
B BOARD
Q BOARD
A1 BOARD
CN0102
CN0108
CN0101
CN0107
CN0109
IF BLOCK
TUNER
TU101

Board — <Component Side>



A BOARD * MARK

Ref. No.	S2951A	S2953B	S2951D	S2953E	S2951K	S2952U
C106	4.7MF 50V	100MF 16V	4.7MF 50V	4.7MF 50V	4.7MF 50V	4.7MF 50V
C206	0.0022MF	0.0022MF	0.0022MF	0.0022MF	0.0022MF	–
C207	0.0018MF	0.0018MF	0.0018MF	0.0018MF	0.0018MF	–
C230	1MF	1MF	1MF	1MF	1MF	–
C231	1MF	1MF	1MF	1MF	1MF	–
C232	0.0033MF	0.0033MF	0.0033MF	0.0033MF	0.0033MF	–
C233	680P	680P	680P	680P	680P	–
C248	150P	150P	150P	150P	150P	–
D201	DA204K	DA204K	DA204K	DA204K	DA204K	–
IFB101	IFH-389WE	IFH-389FX	IFH-389WE	IFH-389WE	IFH-389EE	IFH-395GB
L1103	–	68UH	–	68UH	–	68UH
JR201	0 : CHIP	–	0 : CHIP	–	0 : CHIP	–
JR202	0 : CHIP	–	0 : CHIP	–	0 : CHIP	–
Q203	2SC2412K	2SC2412K	2SC2412K	2SC2412K	2SC2412K	–
R205	5.6K	5.6K	5.6K	5.6K	5.6K	–
R214	100	100	100	100	100	–
R221	56K	56K	56K	56K	56K	–
R241	4.7K	4.7K	4.7K	4.7K	4.7K	–
R246	100K	100K	100K	100K	100K	–
R359	–	–	–	0 : CHIP	0 : CHIP	0 : CHIP
R360	–	0 : CHIP	–	–	–	–
R361	0 : CHIP	–	0 : CHIP	0 : CHIP	0 : CHIP	0 : CHIP
R362	–	0 : CHIP	–	–	–	–
R364	0 : CHIP	–	0 : CHIP	0 : CHIP	0 : CHIP	0 : CHIP
R365	0 : CHIP	–	0 : CHIP	0 : CHIP	0 : CHIP	0 : CHIP
R366	0 : CHIP	–	0 : CHIP	0 : CHIP	0 : CHIP	0 : CHIP
R367	–	0 : CHIP	–	–	–	–
R368	–	0 : CHIP	–	–	–	–
R1569	10K	10K	10K	10K	–	10K
R1572	10K	10K	10K	10K	–	10K
R1579	2.2K	2.2K	2.2K	2.2K	–	2.2K
TU101	UV1316	UV1316	UV1316	UV1316	UV1316	U1344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A
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C
D
E
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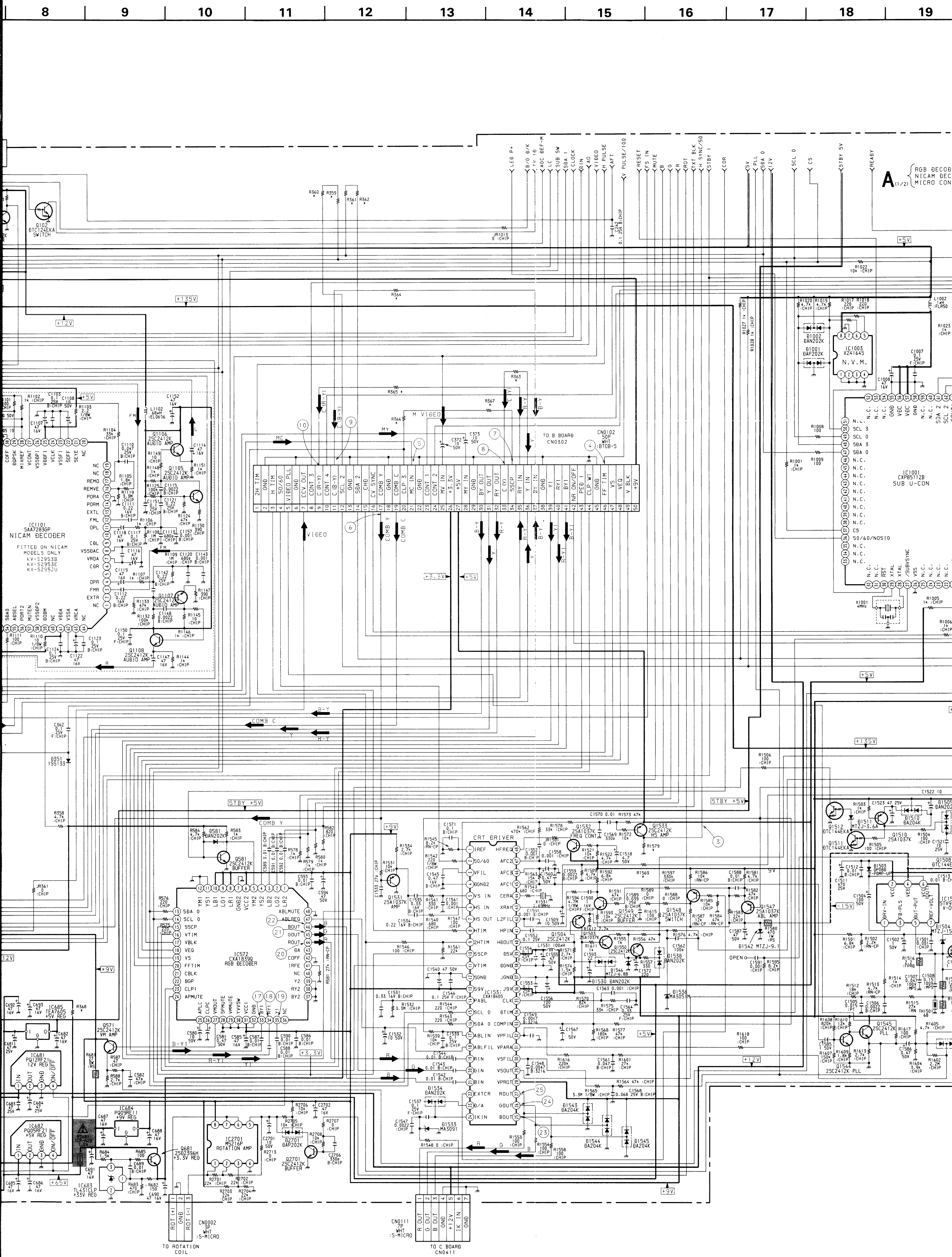
H
I
J
K
L
M
N
O
TU101
IF
IFB101
CN0001 5P REE-L :S-MICRO
GND
SCL 0
SDA 0
CS
AGC
Q103 DTC124EKA SWITCH
D073 MTZJ-5.6B
D071 MTZJ-5.6B
D069 DAP202K
D075 DAN202K
CN0113 4P WHT :S-MICRO
HP R OUT
GND
HP L OUT
LC
TO H1 BOARD CN1113
D1003 DAN202K
D101 MTZJ-33C
Q107 2SC2551O-TPE2 REG CONT
Q106 2SA1207-AA +33V REG
Q203 2SC2412K BUFFER
Q102 DTC124EKA SWITCH
+12V
+5V
+9V
+135V
CN0101 20P WHT :BTOB-S
CENT IN
+12V
SUR IN
SCLO
SDA1
+9V
GND
CLOCK
DATA
ENABLE
GND
LEQ OUT
GND
REQ OUT
GND
+5V
RESET
LEQ IN
REQ IN
GND
TO A1 BOARD CN1101
IC201 TDA6812-2MGEG AUDIO CONTROL
IC202 TDA2822M H.P. AMP
IC1101 SAA7283GP NICAM DECODER
FITTED ON NICAM MODELS ONLY KV-S2953B KV-S2953E KV-S2952U
Q1106 2SC2412K AUDIO AMP
Q1105 2SC2412K AUDIO AMP
Q1107 2SC2412K AUDIO AMP
Q1108 2SC2412K AUDIO AMP
D1101 DAN202K
D1102 1SV214
CN0106 40P WHT :BTOB-S
M VIDEO
MY
MC
IC351 TDA8443B YUV/RGB INTERFACE
Q351 2SA1037K CLAMP
Q352 2SA1037K Y AMP
D351 1SS133
COMB C
COMB Y
R-Y
B-Y
Y
TO J BOARD CN0806
VIDEO IN
PIP V IN
TV VIDEO
PIP L IN
PIP R IN
R OUT
L OUT
R IN
L IN
CN0107 20P WHT :BTOB-S
AUDIO OUT (SURROUND) IC261 TDA7265
AUDIO OUT (MAIN) IC251 TDA7265
SURR
CENT
SUR.OUT
CENT OUT
SP PROTECT
VAR R OUT
VAR L OUT
SP R OUT
SP L OUT
TO J BOARD CN0807
Q254 2SC2412K MUTE
Q255 2SC2412K MUTE
Q253 2SA1037K POWER ON MUTE
Q281 2SC2412K PROTECT CONT
Q282 2SC2412K PROTECT CONT
Q256 2SC2412K MUTE CONT
Q257 2SC2412K MUTE CONT
Q252 2SC2412K MUTE CONT
D255 DAN202K
D265 DA204K
D263 DAN202K
IC685 TEA7605 +5V REG
IC681 PQ12RF21 12V REG
IC682 PQ05RF21 +5V REG
IC683 TL431CLP +33V REG
IC684 PQ09RE11 +9V REG
Q571 2SC2412K VM AMP
Q681 2SD2396H +3.3V REG
-22V
+22V
+65V
CN0109 1P
CN0103 8P WHT :BTOB-P
TO D BOARD CN0503
CN0002 3P WHT :S-MICRO
TO ROTATION COIL
ROT (+)
GND
ROT (-)
B-#SSAE3.<...>-A..-S295 1/2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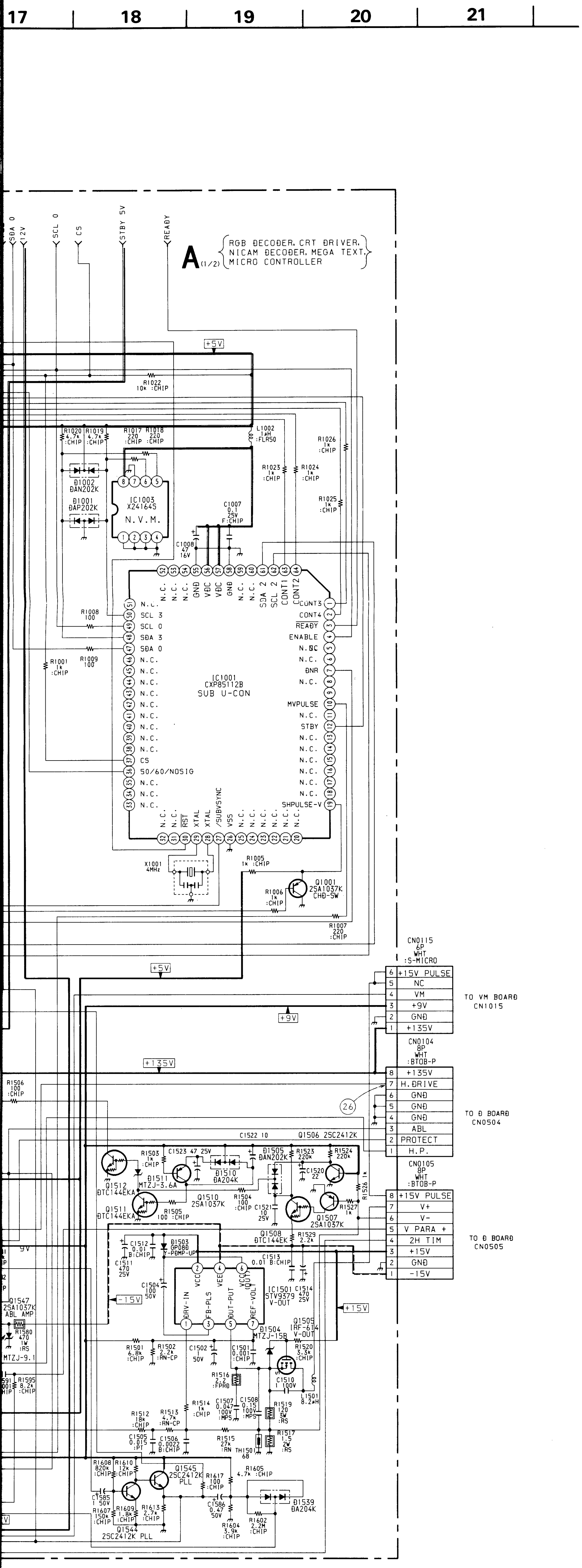
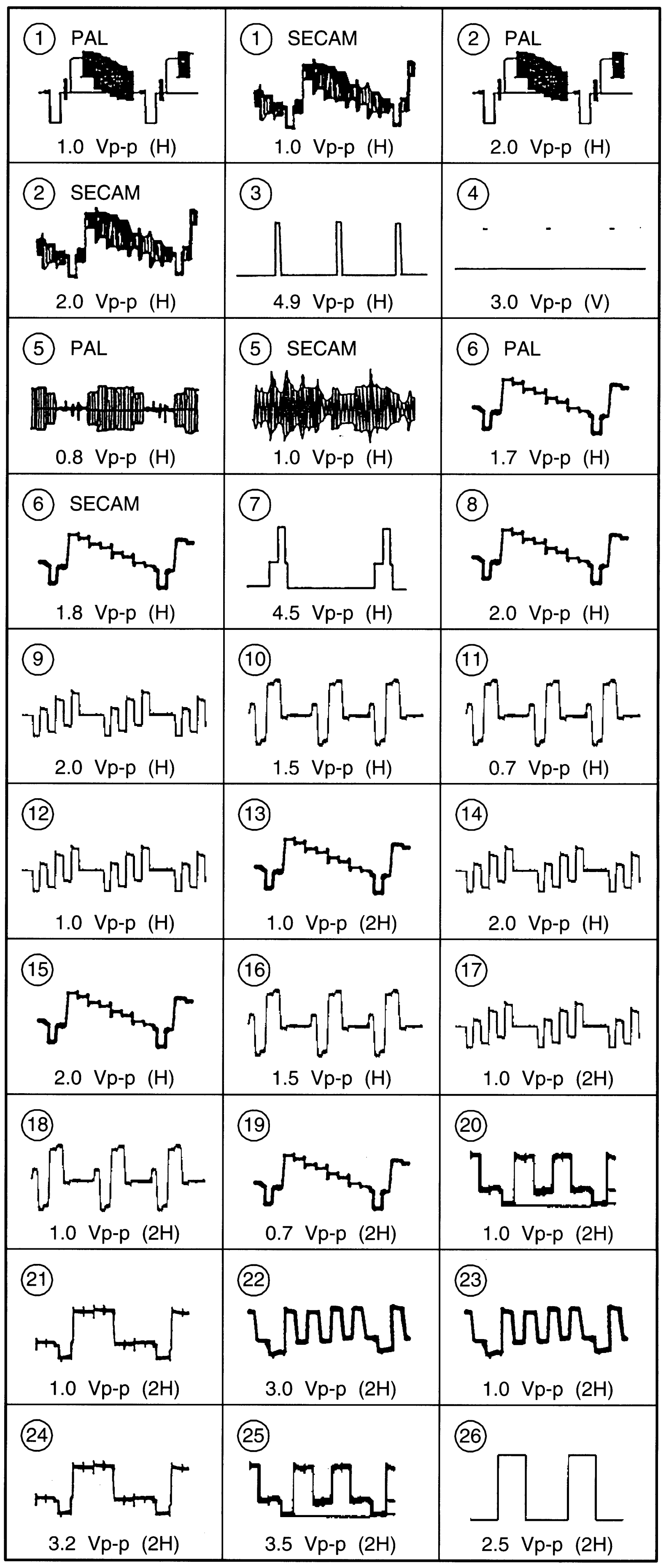
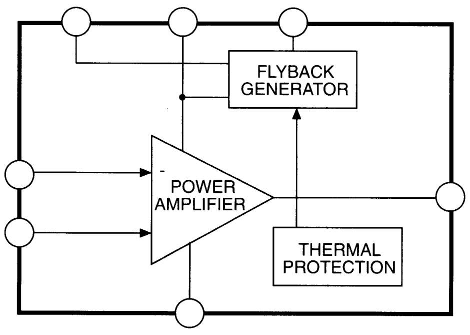
A (1/2) RGB DECODER, NICAM DECODER, MICRO CON
IC1101 SAA7283GP NICAM DECODER
FITTED ON NICAM MODELS ONLY KV-S2953B KV-S2953E KV-S2952U
Q102 DTC124EKA SWITCH
Q1106 2SC2412K AUDIO AMP
Q1105 2SC2412K AUDIO AMP
Q1107 2SC2412K AUDIO AMP
Q1108 2SC2412K AUDIO AMP
IC1001 CXP85112B SUB U-CON
IC1003 X24164S N.V.M.
D1001 DAP202K
D1002 DAN202K
X1001 4MHz
TO B BOARD CN0302
CN0102 50P WHT :DTOB-S
2H TIM
GND
H TIM
50/60
VIDEO PLL
CV OUT
CONT 3
C (R-Y)
CONT 4
C (B-Y)
SCL 2
SDA 2
CHD
CV SYNC
COMB Y
COMB C
CLP 3
MC IN
CONT 1
CONT 2
MV IN
+3.3V
+5V
MY IN
BY OUT
Y OUT
RY OUT
C (Y)
SSCP
RY IN
Y IN
BY IN
RY1
Y1
BY1
NR ON/OFF
PED 1
CLP W1
FF TIM
VS
VEQ
V BLK
+9V
LED P+
B/G B/K
TV 1B
AGC DEF-M
LC
SUB SW
SDA 1
CLOCK
DIN
AD
VIDEO
H PULSE
AFT
V PULSE/100
RESET
FS IN
MUTE
B
G
R
ROT
TXT BLK
H SYNC/50
STBY 1
COR
5V
PLL
SDA 0
12V
SCL 0
CS
STBY 5V
READY
+5V
+12V
+135V
+9V
+3.3V
STBY +5V
M VIDEO
VIDEO
COMB C
COMB Y
B-Y
R-Y
Y
IC572 CXA1859Q RGB DECODER
Q581 2SC2412K BUFFER
D581 DAN202K
IC1531 CXA1840S CRT DRIVER
Q1531 2SA1037K AMP
Q1532 2SA1037K FREQ CONT
Q1533 2SC2412K HS AMP
Q1504 2SC2412K
Q1503 2SA1037K
Q1549 2SC2412K BUFFER
Q1548 2SA1037K SWITCH
Q1547 2SA1037K ABL AMP
Q1550 2SC2412K
D1530 DAN202K
D1536 MA3051M
D1538 DAN202K
D1542 MTZJ-9.1
D1543 DA204K
D1544 DA204K
D1545 DA204K
D1534 DAN202K
D1533 MA3091
X1531 4.43MHz
Q1512 DTC144EKA
Q1511 DTC144EKA
Q1510 2SA1037K
D1511 MTZJ-3.6A
D1510 DA204K
Q1544 2SC2412K PLL
Q1545 2SC2412K PLL
IC685 TEA7605 +5V REG
IC681 PQ12RF21 12V REG
IC682 PQ05RF21 +5V REG
IC684 PQ09RE11 +9V REG
IC683 TL431CLP +33V REG
Q681 2SD2396H +3.3V REG
Q571 2SC2412K VM AMP
IC2701 M5216P ROTATION AMP
D2701 DAP202K
Q2701 2SC2412K BUFFER
CN0002 3P WHT :S-MICRO
ROT (+)
GND
ROT (-)
TO ROTATION COIL
CN0111 7P WHT :S-MICRO
R OUT
G OUT
B OUT
GND
+12V
IK IN
GND
TO C BOARD CN0411


17
18
19
20
21
SDA 0
12V
SCL 0
CS
STBY 5V
READY
A (1/2) RGB DECODER, CRT DRIVER, NICAM DECODER, MEGA TEXT, MICRO CONTROLLER
+5V
R1022 10k :CHIP
R1020 4.7k :CHIP
R1019 4.7k :CHIP
R1017 220 :CHIP
R1018 220 :CHIP
L1002 1µH :FLR50
R1026 1k :CHIP
R1023 1k :CHIP
R1024 1k :CHIP
R1025 1k :CHIP
D1002 DAN202K
D1001 DAP202K
IC1003 X24164S N.V.M.
C1007 0.1 25V F:CHIP
C1008 47 16V
IC1001 CXP85112B SUB U-CON
N.C.
GND
VDC
SDA 2
SCL 2
CONT1
CONT2
CONT3
CONT4
READY
ENABLE
N.DC
DNR
MVPULSE
STBY
SHPULSE-V
SCL 3
SCL 0
SDA 3
SDA 0
CS
50/60/NOSIG
RST
XTAL
/SUBVSYNC
VSS
R1008 100
R1009 100
R1001 1k :CHIP
X1001 4MHz
R1005 1k :CHIP
R1006 1k :CHIP
Q1001 2SA1037K CHD-SW
R1007 220 :CHIP
+5V
+9V
+135V
CN0115 6P WHT :S-MICRO
+15V PULSE
NC
VM
+9V
GND
+135V
TO VM BOARD CN1015
CN0104 8P WHT :BTOB-P
+135V
H.DRIVE
GND
ABL
PROTECT
H.P.
TO D BOARD CN0504
26
CN0105 8P WHT :BTOB-P
+15V PULSE
V+
V-
V PARA +
2H TIM
+15V
GND
-15V
TO D BOARD CN0505
C1522 10
Q1506 2SC2412K
R1503 1k :CHIP
C1523 47 25V
D1505 DAN202K
R1523 220k
R1524 220k
C1520 22
D1510 DA204K
D1511 MTZJ-3.6A
Q1512 DTC144EKA
Q1510 2SA1037K
Q1511 DTC144EKA
R1504 100 :CHIP
R1505 100 :CHIP
C1521 10 25V
Q1507 2SA1037K
R1526 1k
R1527 1k
Q1508 DTC144EK
R1529 2.2k
C1512 0.01 B:CHIP
D1503 GP08D
C1511 470 25V
C1504 100 50V
C1513 0.01 B:CHIP
IC1501 STV9379 V-OUT
C1514 470 25V
VCC
VEE
VCC (OUT)
DRV-IN
FB-PLS
OUT-PUT
REF-VOL
+15V
-15V
D1504 MTZJ-15B
Q1505 IRF-614 V-OUT
R1501 6.8k :CHIP
R1502 2.2k :RN-CP
C1502 1 50V
C1501 0.001 :CHIP
R1520 3.3k :CHIP
R1516 2.2 :FPRD
C1510 1 100V
L1501 8.2nH
R1512 18k :CHIP
R1513 4.7k :RN-CP
R1514 :CHIP
C1507 0.047 100V :MPS
C1508 0.15 100V :MPS
R1519 120 2W :RS
C1505 0.015 :PT
C1506 0.0022 B:CHIP
R1515 27k :RN
TH1501 68
R1517 1.5 2W :RS
R1608 820k :CHIP
R1610 12k :CHIP
Q1545 2SC2412K PLL
R1617 100 :CHIP
R1605 4.7k :CHIP
C1585 1 50V
R1607 150k :CHIP
R1609 1.8k :CHIP
R1613 2.7k :CHIP
C1586 0.47 50V
R1604 3.9k :CHIP
R1602 2.2M :CHIP
D1539 BA204K
Q1544 2SC2412K PLL
R1506 100 :CHIP
Q1547 2SA1037K ABL AMP
R1580 470 1W :RS
MTZJ-9.1
R1595 8.2k :CHIP
9V

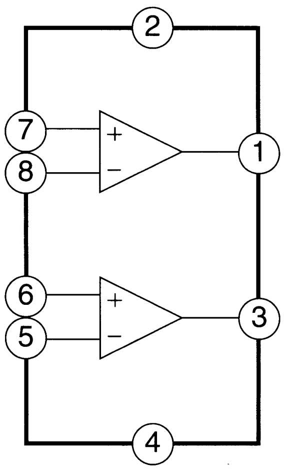
WAVEFORMS A BOARD



A Board IC1501 STV9379S


FLYBACK GENERATOR
POWER AMPLIFIER
THERMAL PROTECTION

A Board IC202 TDA2822M



Ref.No.	Pin No.
IC1001	1
	2
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	5-6
	7
	8-9
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	11
	12
	13-18
	19
	20-25
	26
	27
	28
	29
	30
	31-54
	55
	56
	57
	58
	59-60
	61
	62
	63
	64
IC1101	1-2
	3
	4
	5-6
	7
	8
	9-10
	11
	12
	13-14
	15
	16
	17
	18-21
	22
	23
	24
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	26
	27-30
	31-33
	34
	35-37
	38
	39
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	41
	42
	43

Ref.No.	Pin No.
IC684	1
	2
	3
IC685	1
	2
	3
IC686	1
	2
	3
	4
IC572	1-3
	6
	7
	8-10
	11-12
	13-14
	15
	16
	17
	18-20
	21-22
	23
	25
	26
	28-30
	31
	32
	33-35
	37-39
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	44-45
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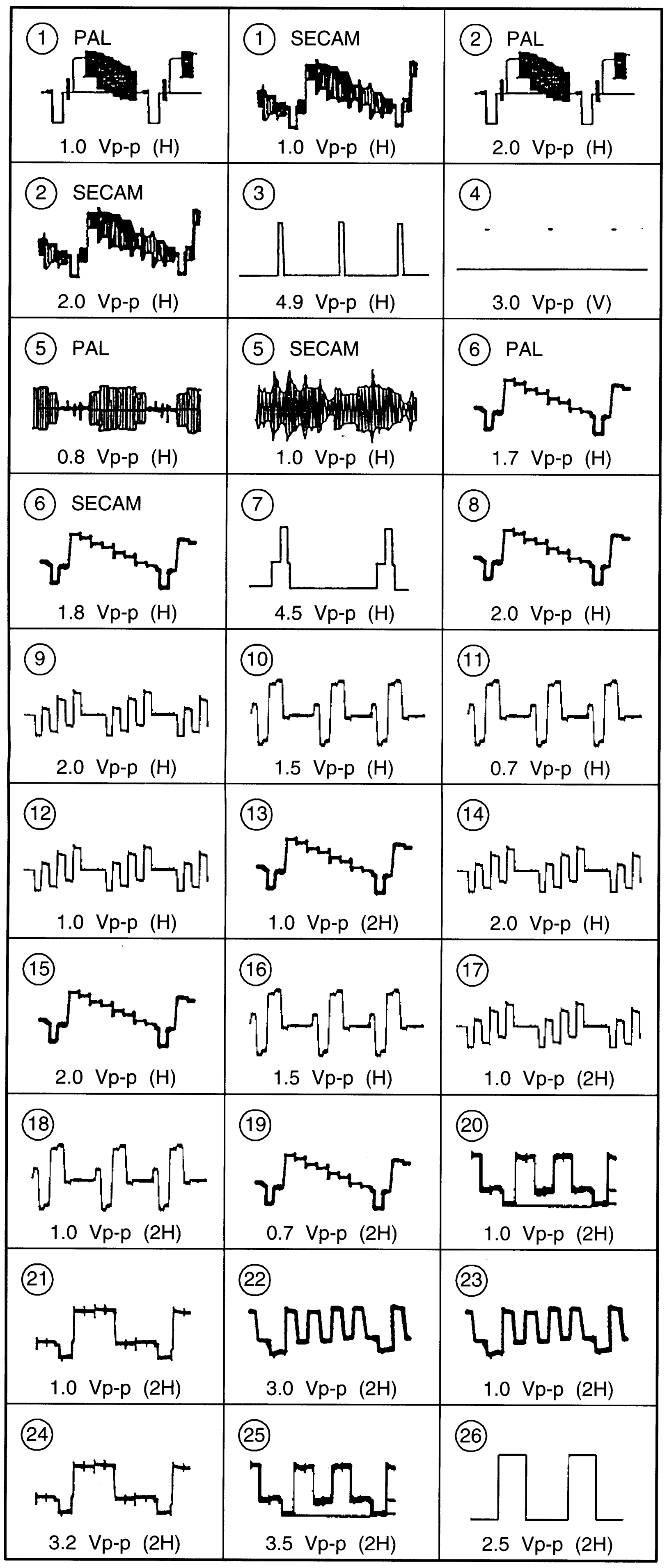
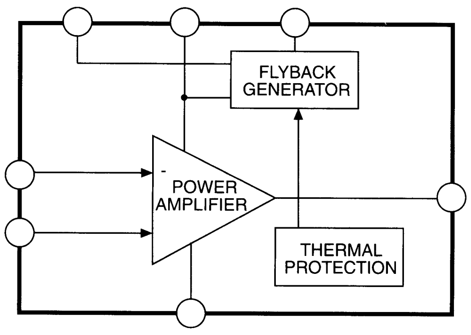
	47
	48

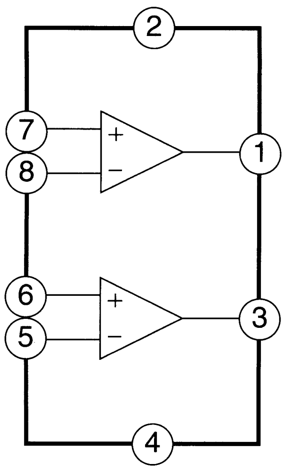
WAVEFORMS A BOARD



A Board IC1501 STV9379S



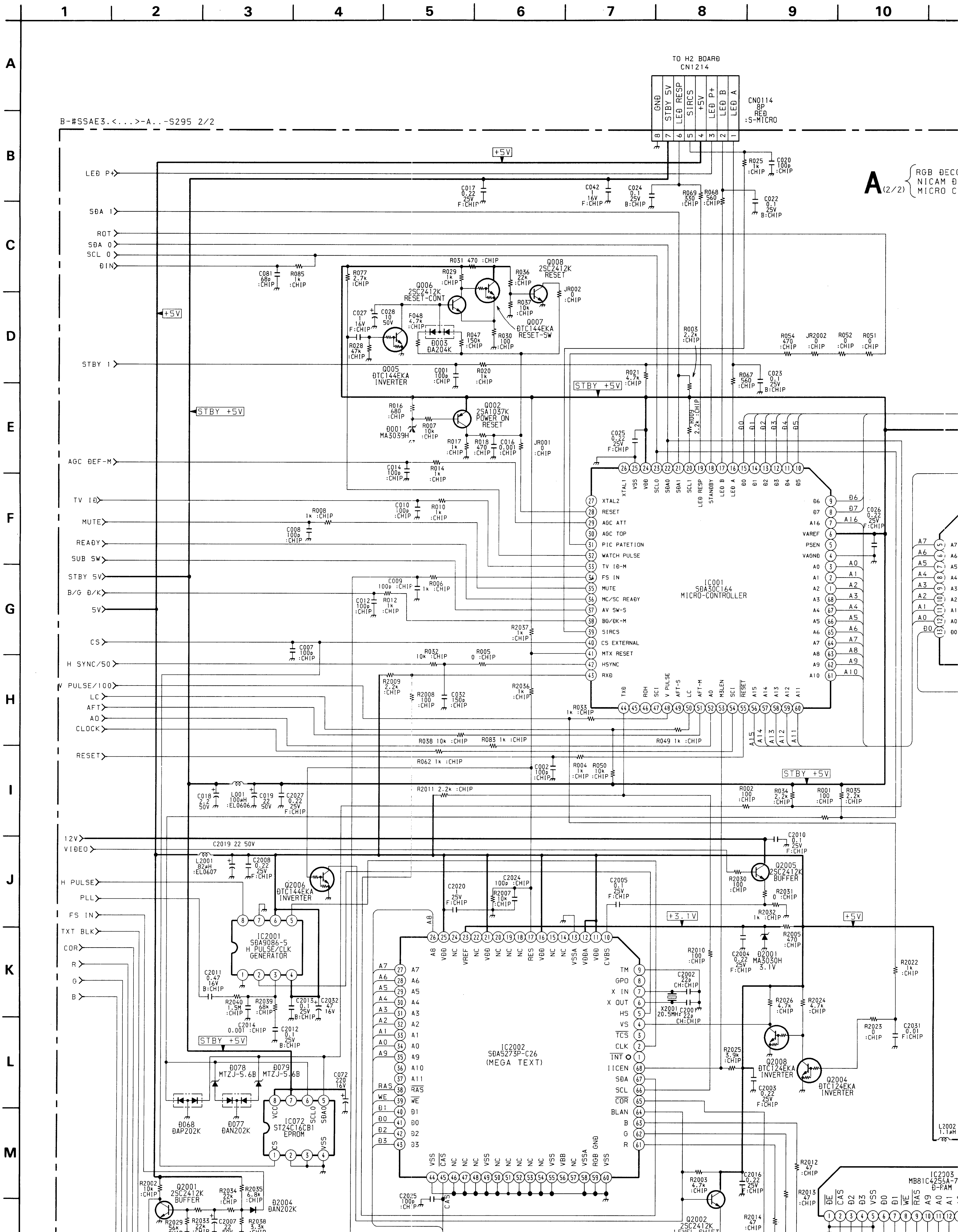
A Board IC202 TDA2822M



Ref.No.	Pin No.	Voltage (V)	Ref.No.	Pin No.	Voltage (V)	Ref.No.	Pin No.	Voltage (V)
IC1001	1	0		44	GND		5	3.6
	2	0		45-47	2.1		6	3.0
	3	5.0		48	GND		7	3.1
	4	4.0		49-50	4.4		8	1.7
	5-6	-		51-52	-		9	1.8
	7	0		53-54	4.0		10	0.8
	8-9	-		55-60	-		11	0.5
	10	0.2		61	4.4		12	GND
	11	-		62	GND		13	9.0
	12	1.5		63	2.2		14	0
	13-18	-		64	-		15	3.8
	19	1.0	IC201	1	0		16	4.0
	20-25	-		2-7	6.1		17	4.4
	26	GND		8	12.0		18	8.7
	27	2.0		9-10	4.0		19-21	3.6
	28	2.5		11	0.1		22	0.8
	29	2.5		12	0		23	2.4
	30	4.0		13-15	3.0		24	5.0
	31-54	-		16	0		25	2.1
	55	GND		17-19	6.1		26	2.2
	56	5.0		20	0		27	2.1
	57	5.0		21	6.1		28	8.0
	58	GND		22	0		29-32	4.0
	59-60	-		23-31	6.1		33	5.1
	61	6.3		32-35	0		34	0.2
	62	4.2		36-43	6.1		35	2.4
	63	0		44	0		36	9.0
	64	0	IC202	1	5.4		37	GND
IC1101	1-2	-		2	12.0		38	0
	3	1.0		3	5.4		39	5.0
	4	2.2		4	GND		40	2.1
	5-6	-		5	0.5		41	2.2
	7	2.2		6-7	0		42	4.2
	8	0		8	0.5		43	0
	9-10	-	IC2701	1-3	4.4		44	
	11	2.2		4.0	–		45-47	4.6
	12	1.0		5-7	–		48	4.4
	13-14	-		8.0	0	IC1501	1	2.2
	15	GND		9.0	0.2		2	14.0
	16	2.2	IC1003	1-4	GND		3	-14.0
	17	4.0		5-6	5.0		4	-16.0
	18-21	-		7	GND		5	-1.4
	22	2.2		8	5.0		6	14.5
	23	0	IC251/261	1	-20.0		7	2.2
	24	-		2	0	IC681	1	13.3
	25	2.2		3	20.0		2	12.0
	26	-		4	0		3	GND
	27-30	2.1		5	10.0		4	2.3
	31-33	-		6	-20.0	IC682	1	5.7
	34	1.8		7-8	0		2	5.0
	35-37	2.1		9	GND		3	GND
	38	4.1		10-11	0		4	2.3
	39	GND	IC1531	1	3.7	IC683	1	2.4
	40	-		2	0.3		2	GND
	41	1.7		3	5.8		3	4.0
	42	3.1		4	GND	All Voltages are indicated in Volts DC		
	43	2.1						

Ref.No.	Pin No.	Voltage (V)
IC684	1	11.9
	2	GND
	3	9.0
IC685	1	5.8
	2	GND
	3	5.0
IC686	1	5.6
	2	5.0
	3	GND
	4	2.3
IC572	1-3	6.0
	6	9.0
	7	GND
	8-10	9.0
	11-12	GND
	13-14	4.0
	15	0.8
	16	0.6
	17	0.5
	18-20	0.3
	21-22	NC
	23	0.2
	25	4.0
	26	4.7
	28-30	GND
	31	9.0
	32	GND
	33-35	4.4
	37-39	GND
	41	2.5
	42	GND
	44-45	2.7
	46	2.6
	47	8.7
	48	NC

Pin No. / Ref.No.	(B) Base	(C) Collector	(E) Emitter
Q102	4.7	0	0
Q103	0	1.7	0
Q106	31.4	32.0	32.0
Q107	0.5	0	0
Q203	0.6	0.1	0
Q251	0.6	0	0
Q252	0	0.6	0
Q253	13.4	-0.4	13.4
Q254	-2.1	0	0
Q255	-2.0	0	0
Q256	-0.1	2.3	0
Q257	0.6	0	0
Q259	21.5	10.5	21.1
Q260	0	21.5	0
Q351	2.8	1.7	3.5
Q352	1.8	0	2.5
Q571	6.4	9.0	5.7
Q581	0.6	0	0
Q1001	0.3	0	1.0
Q1105	3.0	5.6	2.4
Q1107	3.0	5.8	2.4
Q1108	5.8	11.8	5.2
Q1502	0.4	9.0	-3.7
Q1531	5.6	0	6.1
Q1532	9.0	4.4	9.0
Q1533	0.5	0.4	0
Q1544	1.1	4.5	0.6
Q1545	4.5	9.0	4.0
Q1447	4.4	-9.0	5.0
Q1548	6.4	9.0	5.7
Q1549	0.9	-0.2	1.4
Q1532	-1.2	3.0	-1.8


1
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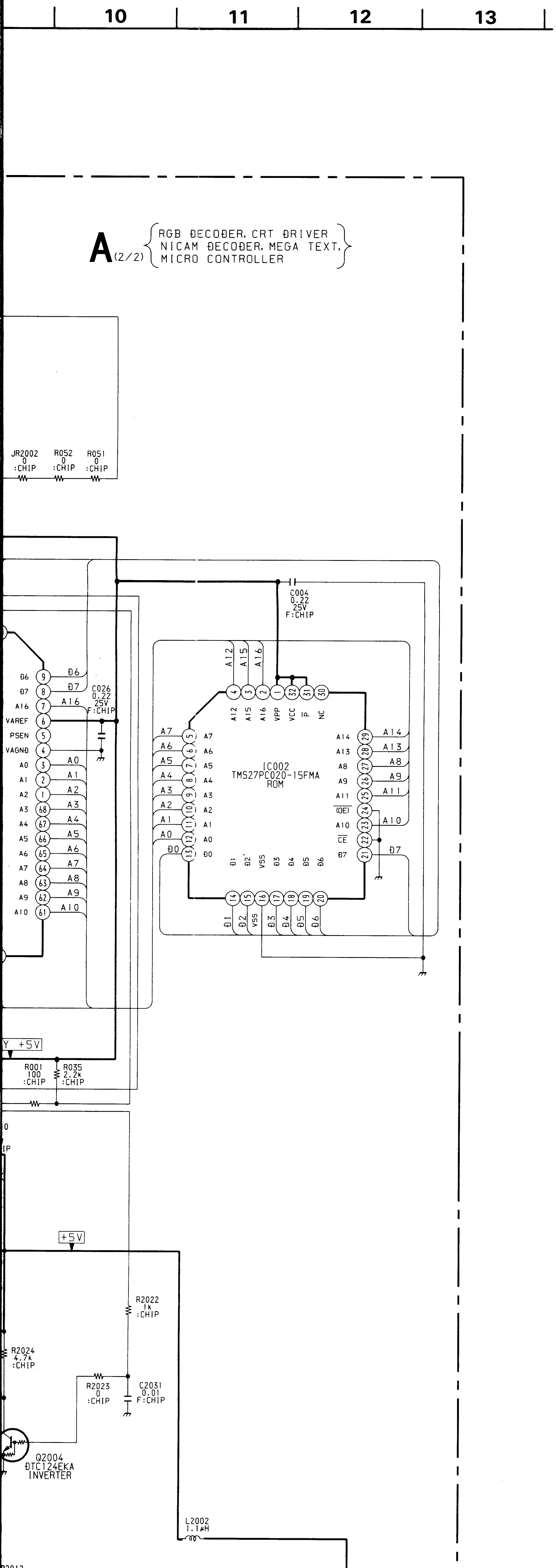
5
6
7
8
9
10
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
B-#SSAE3.<...>-A..-S295 2/2
A(2/2)
RGB DECO
NICAM D
MICRO C
TO H2 BOARD CN1214
GND
STBY 5V
LED RESP
SIRCS
+5V
LED P+
LED B
LED A
CN0114 8P RED :S-MICRO
+5V
STBY +5V
+3.1V
LED P+
SDA 1
ROT
SDA 0
SCL 0
DIN
STBY 1
AGC DEF-M
TV ID
MUTE
READY
SUB SW
STBY 5V
B/G D/K
5V
CS
H SYNC/50
V PULSE/100
LC
AFT
AD
CLOCK
RESET
12V
VIDEO
H PULSE
PLL
FS IN
TXT BLK
COR
R
G
B
IC001 SDA30C164 MICRO-CONTROLLER
Q008 2SC2412K RESET
Q006 2SC2412K RESET-CONT
Q007 DTC144EKA RESET-SW
Q005 DTC144EKA INVERTER
Q002 2SA1037K POWER ON RESET
D001 MA3039H
D003 DA204K
F048 4.7k :CHIP
IC2001 SDA9086-5 H PULSE/CLK GENERATOR
Q2006 DTC144EKA INVERTER
IC2002 SDA5273P-C26 (MEGA TEXT)
X2001 20.5MHz
Q2005 2SC2412K BUFFER
D2001 MA3030H 3.1V
Q2008 DTC124EKA INVERTER
Q2004 DTC124EKA INVERTER
Q2002 2SC2412K LEVEL SHIFT
IC072 ST24C16CB1 EPROM
D078 MTZJ-5.6B
D079 MTZJ-5.6B
D068 DAP202K
D077 DAN202K
Q2001 2SC2412K BUFFER
D2004 DAN202K
L001 100µH :EL0606
L2001 82µH :EL0607
IC2003 MB81C4256A-7 D-RAM
L2002 1.1mH
XTAL2
RESET
AGC ATT
AGC TOP
PIC PATETION
WATCH PULSE
TV ID-M
FS IN
MUTE
MC/SC READY
AV SW-S
BG/DK-M
SIRCS
CS EXTERNAL
MTX RESET
HSYNC
RXD
TXD
V PULSE
AFT-S
AFT-M
M3LEN
VAREF
PSEN
VAGND
TM
GPO
X IN
X OUT
HS
VS
TCS
CLK
INT
I1CEN
SDA
SCL
COR
BLAN
R031 470 :CHIP
R038 10k :CHIP
R083 1k :CHIP
R049 1k :CHIP
R062 1k :CHIP
R2011 2.2k :CHIP
C2019 22 50V


10
11
12
13
A(2/2) RGB DECODER, CRT DRIVER NICAM DECODER, MEGA TEXT, MICRO CONTROLLER
JR2002 0 :CHIP
R052 0 :CHIP
R051 0 :CHIP
C004 0.22 25V F:CHIP
C026 0.22 25V F:CHIP
IC002 TMS27PC020-15FMA ROM
+5V
R001 100 :CHIP
R035 2.2k :CHIP
R2022 1k :CHIP
R2024 4.7k :CHIP
R2023 0 :CHIP
C2031 0.01 F:CHIP
Q2004 DTC124EKA INVERTER
L2002 1.1μH
R2012 47 :CHIP
R2013 47 :CHIP
IC2003 MB81C4256A-70PSZ D-RAM
C2017 0.22 25V F:CHIP

Ref.No.	Pin No.	Voltage (V)
IC001	6	5.0
	16-17	3.7
	18	2.5
	19	3.6
	20-21	5.0
	22-23	4.0
	24	5.0
	26	2.1
	27	2.3
	28	4.7
	29	0
	30	4.8
	31	2.4
	32	1.6
	34	5.0
	36	5.0
	37	3.4
	38	3.3
	39-40	5.0
	41	0.1
	42	0.4
	43	5.0
	44	4.8
	48	0.3
	49	1.3
	50	5.0
	51	2.4
	52	5.0
	53	4.5
	54	5.0
	55	3.8
IC002	1	5.0
	31-32	5.0
IC2002	2	1.5
	4-5	0.1
	6-7	1.7
	10	0.8
	11-12	5.0
	16	5.0
	17	0.1
	21	5.0
	23	3.0
	25	5.0
	45	4.4
	65	0.6
	66-67	5.0
	68	4.5
IC2003	15	4.5

Pin No. / Ref.No.	(B) Base	(C) Collector	(E) Emitter
Q002	4.2	4.7	4.8
Q005	-0.1	0	0
Q006	0	4.8	0.8
Q007	4.8	0.9	0.8
Q008	0.3	4.8	0
Q2001	0.3	5.0	0
Q2002	0	4.8	0
Q2004	0.3	4.0	0
Q2005	3.8	12.0	3.1
Q2006	0.1	0	0
Q2008	4.0	0.1	0

J BOARD

IC	
IC401	C-4
IC402	D-9
TRANSISTOR	
Q401	C-4
Q402	C-4
Q403	C-5
Q404	D-6
DIODE	
D401	B-5
D403	B-4
D405	B-4
D406	B-4
D407	B-4
D901	B-5
D902	B-6
D903	A-8
D904	A-9
D905	B-7
D906	A-7
D907	B-11
D908	E-11
D909	C-11
D910	C-11
D911	E-11
D913	B-9
D914	E-10
D915	C-8
D916	D-9
D917	D-8
D919	B-8
D920	D-6
D921	D-4
D922	D-5
D923	D-7
D924	D-10
D925	D-11
D926	D-10
D927	E-11
D928	B-11
D930	B-10
D931	A-7
D932	B-6

- ▒ : Pattern from the side which enables see
- ▓ : Pattern of the rear side.

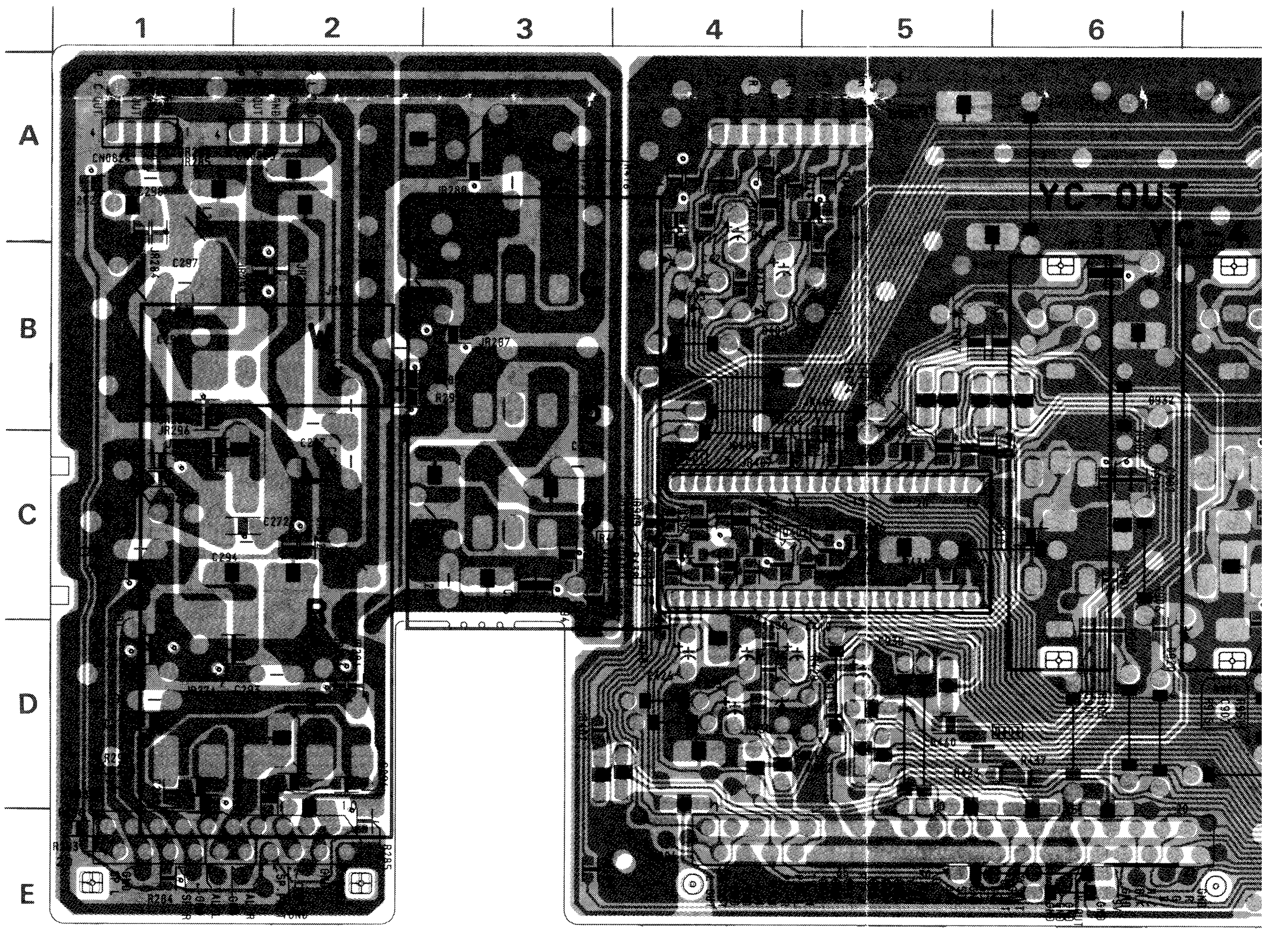
(B) ase	(C) Collector	(E) Emitter
4.2	4.7	4.8
0.1	0	0
0	4.8	0.8
4.8	0.9	0.8
0.3	4.8	0
0.3	5.0	0
0	4.8	0
0.3	4.0	0
3.8	12.0	3.1
0.1	0	0
4.0	0.1	0

J [VIDEO/AUDIO IN/OUT, SPEAKER TERMINAL]

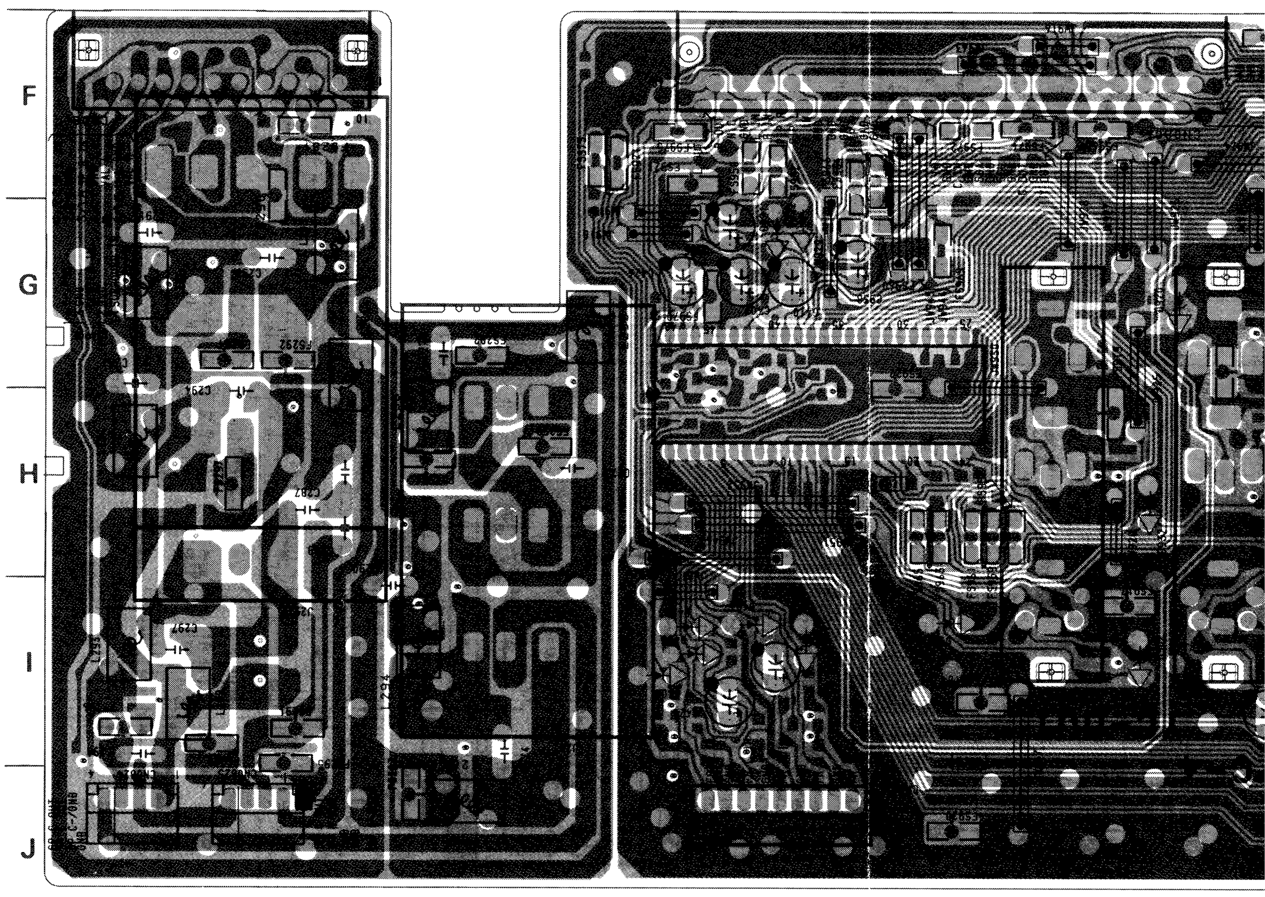
J BOARD

IC	
IC401	C-4
IC402	D-9
TRANSISTOR	
Q401	C-4
Q402	C-4
Q403	C-5
Q404	D-6
DIODE	
D401	B-5
D403	B-4
D405	B-4
D406	B-4
D407	B-4
D901	B-5
D902	B-6
D903	A-8
D904	A-9
D905	B-7
D906	A-7
D907	B-11
D908	E-11
D909	C-11
D910	C-11
D911	E-11
D913	B-9
D914	E-10
D915	C-8
D916	D-9
D917	D-8
D919	B-8
D920	D-6
D921	D-4
D922	D-5
D923	D-7
D924	D-10
D925	D-11
D926	D-10
D927	E-11
D928	B-11
D930	B-10
D931	A-7
D932	B-6

— J Board — <Conductor Side>



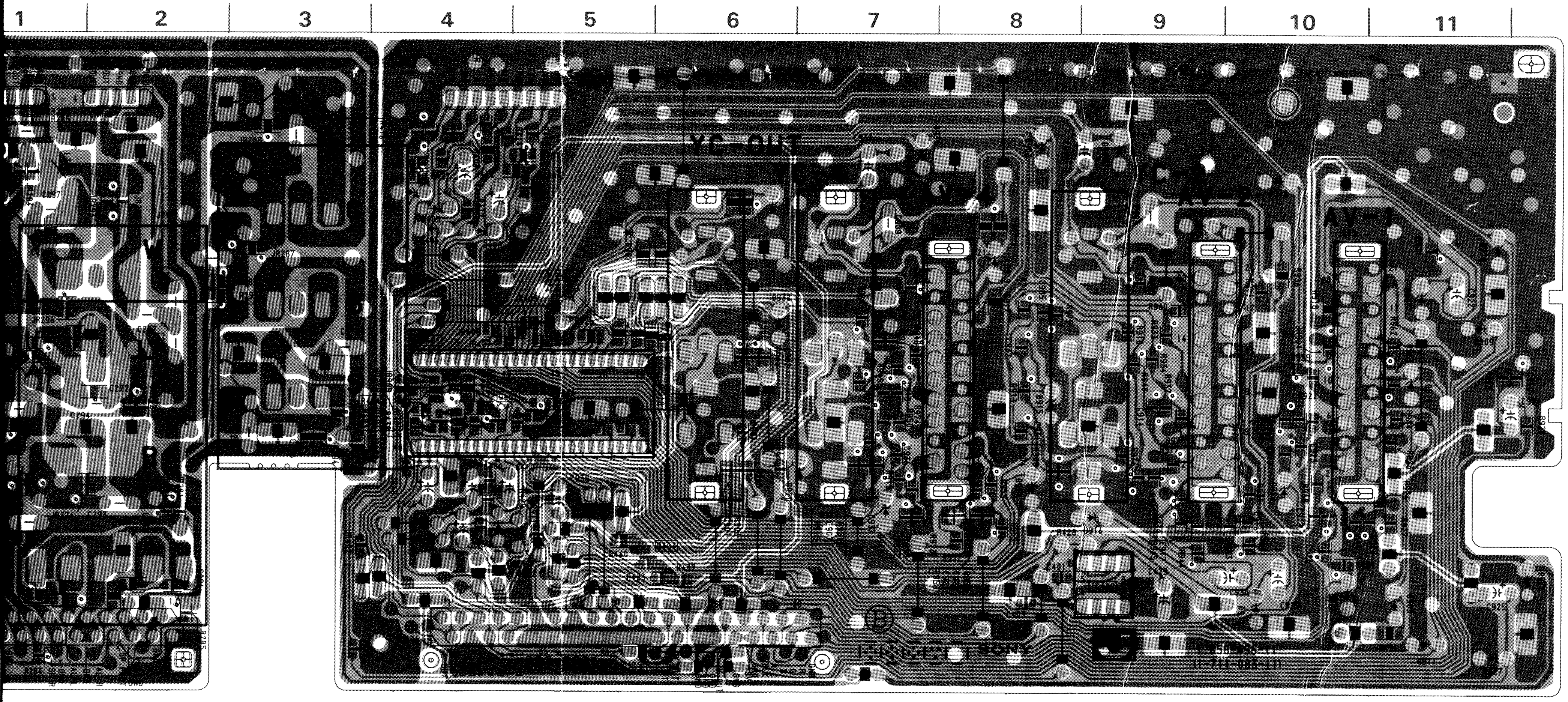
— J Board — <Component Side>



- ▨ : Pattern from the side which enables seeing.
- ■ : Pattern of the rear side.

VIDEO/AUDIO IN/OUT,
SPEAKER TERMINAL

rd — <Conductor Side>


1
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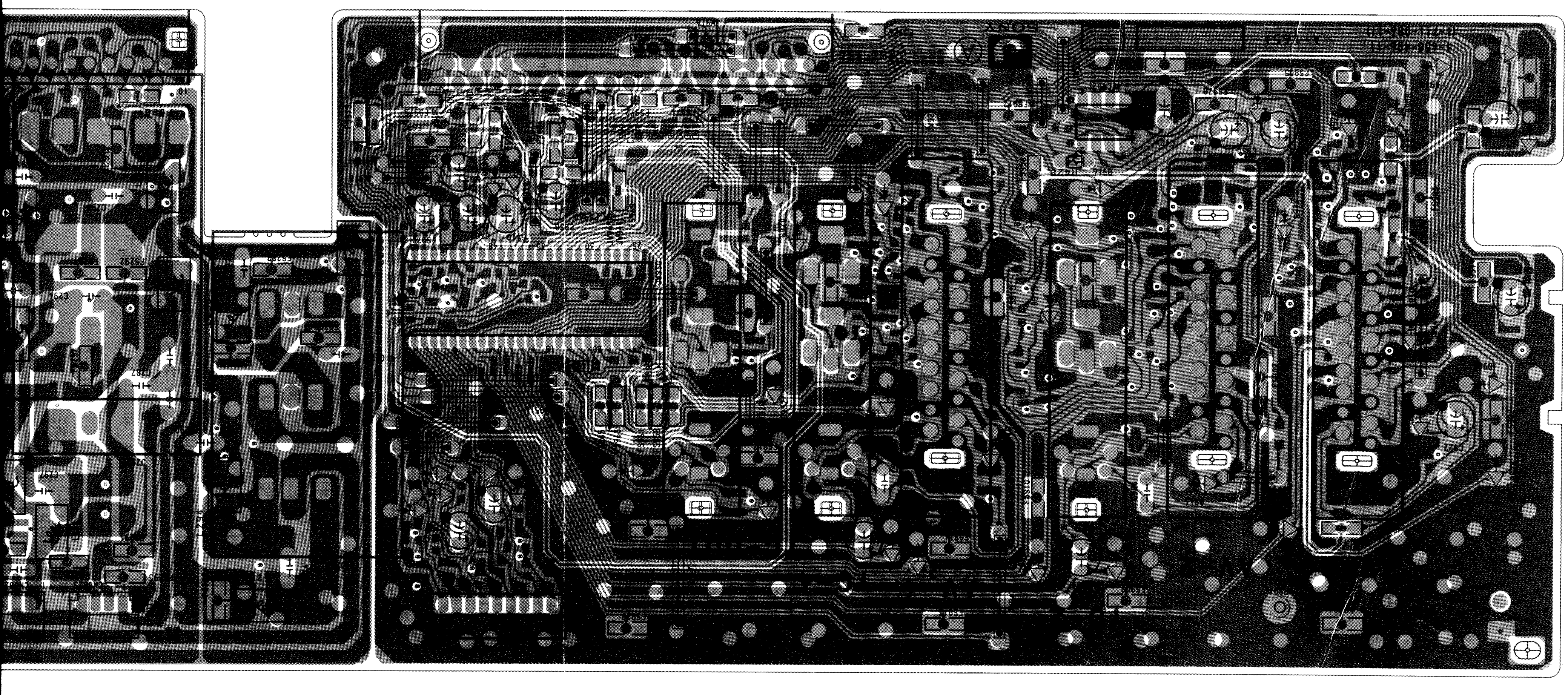
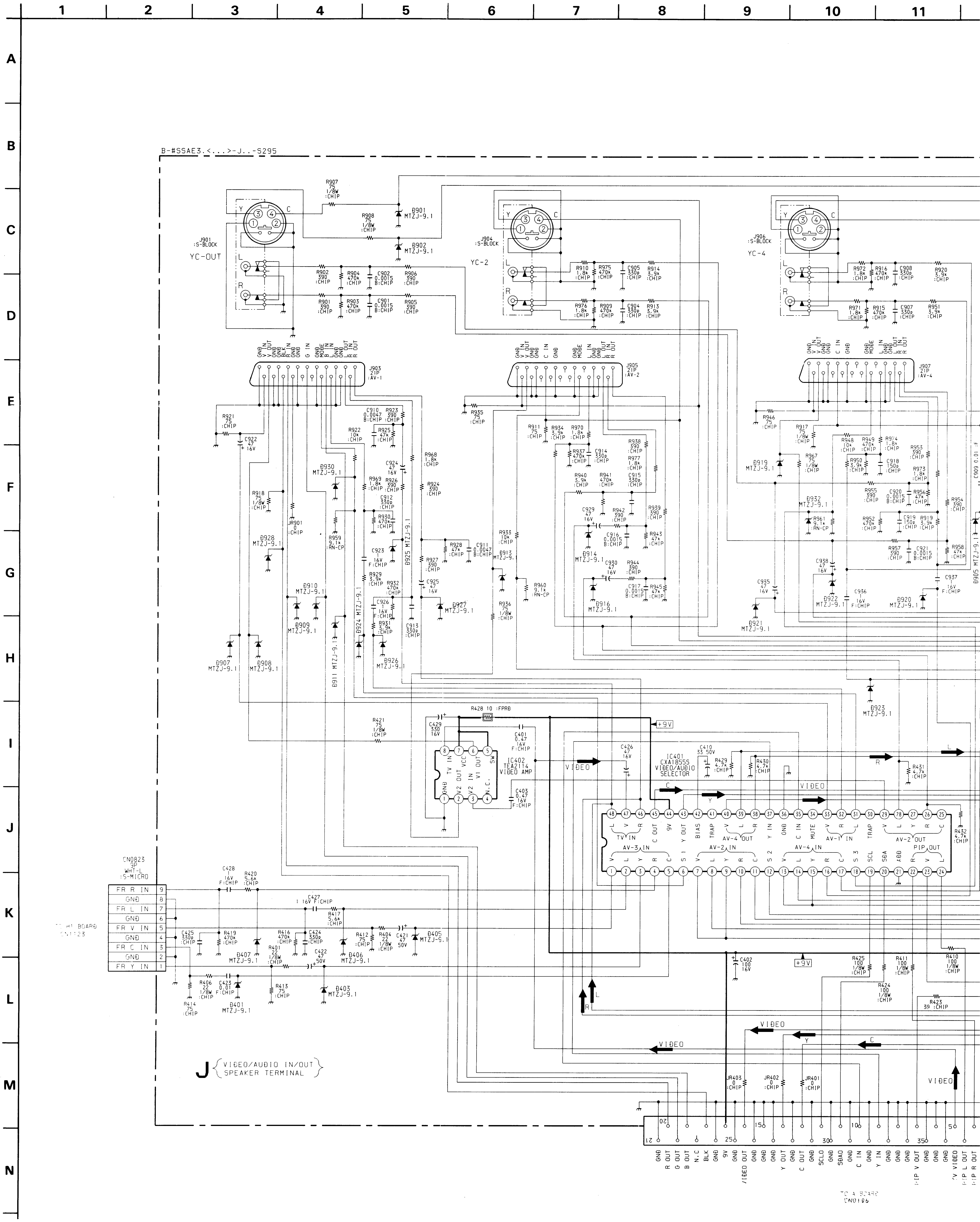
11
YC OUT
AV 2
AV 1
SONY

rd — <Component Side>




J
VIDEO/AUDIO IN/OUT
SPEAKER TERMINAL
B-#SSAE3.<...>-J..-S295
J901 :S-BLOCK
YC-OUT
J904 :S-BLOCK
YC-2
J906 :S-BLOCK
YC-4
J903 21P :AV-1
J905 21P :AV-2
J907 21P :AV-4
IC401 CXA1855S VIDEO/AUDIO SELECTOR
IC402 TEA2114 VIDEO AMP
R428 10 :FPRD
+9V
VIDEO
C
Y
L
R
CN0823 9P WHT-L :S-MICRO
FR R IN
GND
FR L IN
GND
FR V IN
GND
FR C IN
GND
FR Y IN
TO HT BOARD CN1123
TO A BOARD CN0106
GND
R OUT
G OUT
B OUT
N.C
BLK
9V
VIDEO OUT
Y OUT
C OUT
SCL0
SDA0
C IN
Y IN
PIP V OUT
TV VIDEO
PIP L OUT
PIP R OUT
TV IN
AV-3 IN
AV-4 OUT
AV-2 IN
AV-4 IN
AV-1 IN
AV-2 OUT
PIP OUT
BIAS
TRAP
MUTE
SCL
SDA
ADD
1
2
3
4
5
6
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10
11
A
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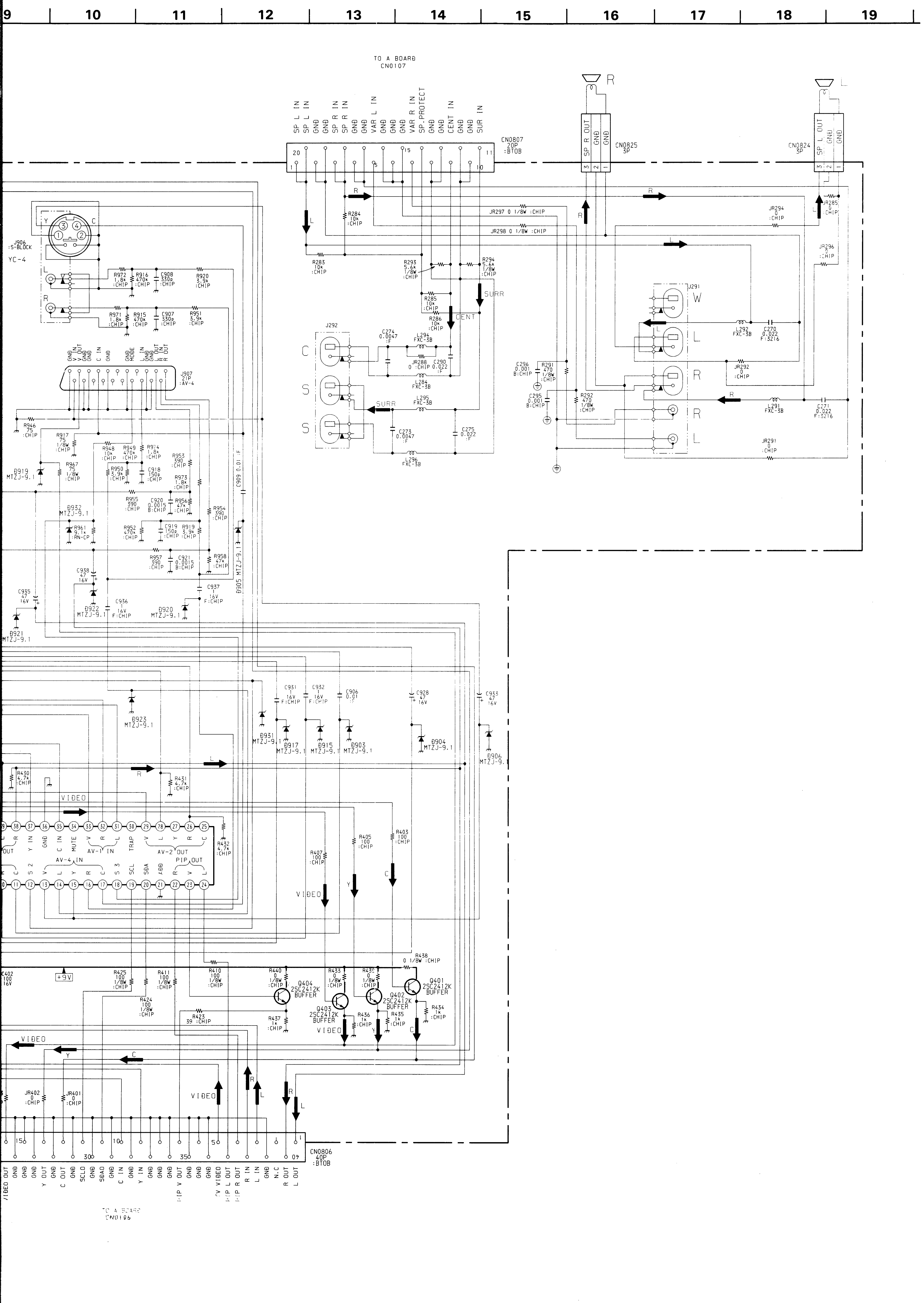
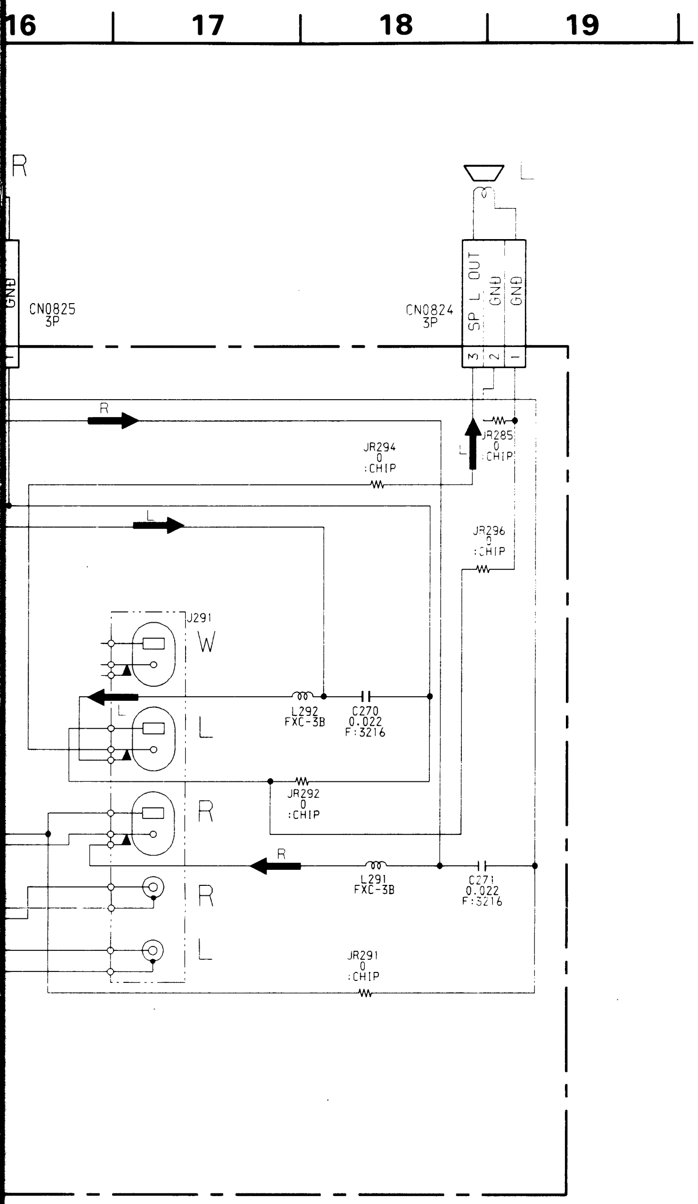
C
D
E
F
G
H
I
J
K
L
M
N



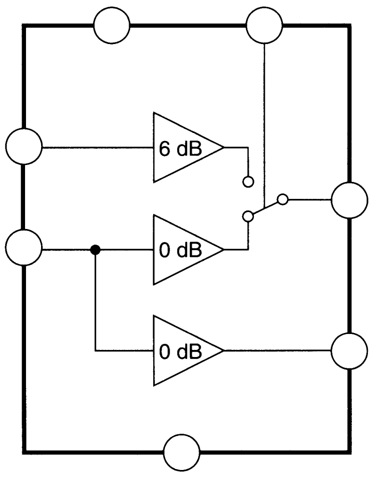
9
10
11
12
13
14
15
16
17
18
19
TO A BOARD CN0107
SP L IN
SP L IN
GND
GND
SP R IN
SP R IN
GND
VAR L IN
GND
GND
GND
VAR R IN
SP.PROTECT
GND
GND
CENT IN
GND
GND
SUR IN
CN0807 20P :BTOB
SP R OUT
GND
GND
CN0825 3P
R
SP L OUT
GND
GND
CN0824 3P
L
J906 :S-BLOCK
YC-4
R284 10k :CHIP
R283 10k :CHIP
JR297 0 1/8W :CHIP
JR298 0 1/8W :CHIP
R293 5.6k 1/8W :CHIP
R294 5.6k 1/8W :CHIP
R285 10k :CHIP
R286 10k :CHIP
SURR
CENT
J292
C274 0.0047 :F
L294 FXC-3B
JR288 0 :CHIP
C290 0.022 :F
L284 FXC-3B
L295 FXC-3B
C273 0.0047 :F
C275 0.022 :F
L296 FXC-3B
C
S
S
J291
W
L
R
R
L
JR294 0 :CHIP
JR285 0 :CHIP
JR296 0 :CHIP
L292 FXC-3B
C270 0.022 F:3216
JR292 0 :CHIP
L291 FXC-3B
C271 0.022 F:3216
JR291 0 :CHIP
C296 0.001 B:CHIP
R291 470 1/8W :CHIP
C295 0.001 B:CHIP
R292 470 1/8W :CHIP
R972 1.8k :CHIP
R916 470k :CHIP
C908 330p :CHIP
R920 3.9k :CHIP
R971 1.8k :CHIP
R915 470k :CHIP
C907 330p :CHIP
R951 3.9k :CHIP
J907 21P :AV-4
R946 75 :CHIP
R917 75 1/8W :CHIP
R967 75 1/8W :CHIP
D919 MTZJ-9.1
R948 10k :CHIP
R949 470k :CHIP
R974 1.8k :CHIP
R953 390 :CHIP
R950 3.9k :CHIP
C918 150p :CHIP
R973 1.8k :CHIP
C909 0.01 :F
D932 MTZJ-9.1
R961 9.1k :RN-CP
R955 390 :CHIP
C920 0.0015 B:CHIP
R956 47k :CHIP
R954 390 :CHIP
R952 470k :CHIP
C919 150p :CHIP
R919 3.9k :CHIP
R957 390 :CHIP
C921 0.0015 B:CHIP
R958 47k :CHIP
D905 MTZJ-9.1
C938 47 16V
C937 1 16V F:CHIP
C935 47 16V
C936 1 16V F:CHIP
D922 MTZJ-9.1
D920 MTZJ-9.1
D921 MTZJ-9.1
C931 1 16V F:CHIP
C932 1 16V F:CHIP
C906 0.01 :F
C928 47 16V
C933 47 16V
D923 MTZJ-9.1
D931 MTZJ-9.1
D917 MTZJ-9.1
D915 MTZJ-9.1
D903 MTZJ-9.1
D904 MTZJ-9.1
D906 MTZJ-9.1
R430 4.7k :CHIP
R431 4.7k :CHIP
R432 4.7k :CHIP
VIDEO
OUT
Y IN
GND
C IN
MUTE
AV-1 IN
V
L
R
TRAP
V
L
R
AV-2 OUT
Y
C
S 2
AV-4 IN
L
Y
R
C
S 3
SCL
SDA
ADD
PIP OUT
R
V
L
R407 100 :CHIP
R405 100 :CHIP
R403 100 :CHIP
VIDEO
Y
C
C402 100 16V
+9V
R425 100 1/8W :CHIP
R411 100 1/8W :CHIP
R410 100 1/8W :CHIP
R424 100 1/8W :CHIP
R423 39 :CHIP
R440 0 1/8W :CHIP
Q404 2SC2412K BUFFER
R437 1k :CHIP
R433 0 1/8W :CHIP
Q403 2SC2412K BUFFER
R430 0 1/8W :CHIP
R436 1k :CHIP
Q402 2SC2412K BUFFER
R435 1k :CHIP
R438 0 1/8W :CHIP
Q401 2SC2412K BUFFER
R434 1k :CHIP
JR402 0 :CHIP
JR401 0 :CHIP
VIDEO
CN0806 40P :BTOB
VIDEO OUT
GND
GND
Y OUT
GND
C OUT
GND
SCLO
SDAO
GND
C IN
GND
Y IN
GND
GND
GND
PIP V OUT
GND
GND
GND
TV VIDEO
PIP L OUT
PIP R OUT
R IN
L IN
GND
N.C
R OUT
L OUT
TO A BOARD CN0106


16
17
18
19
R
L
GND
CN0825
3P
CN0824
3P
SP L OUT
GND
GND
3
2
1
R
L
JR294
0
:CHIP
JR285
0
CHIP
JR296
0
:CHIP
J291
W
L
R
R
L
L292
FXC-3B
C270
0.022
F:3216
JR292
0
:CHIP
R
L291
FXC-3B
C271
0.022
F:3216
JR291
0
:CHIP

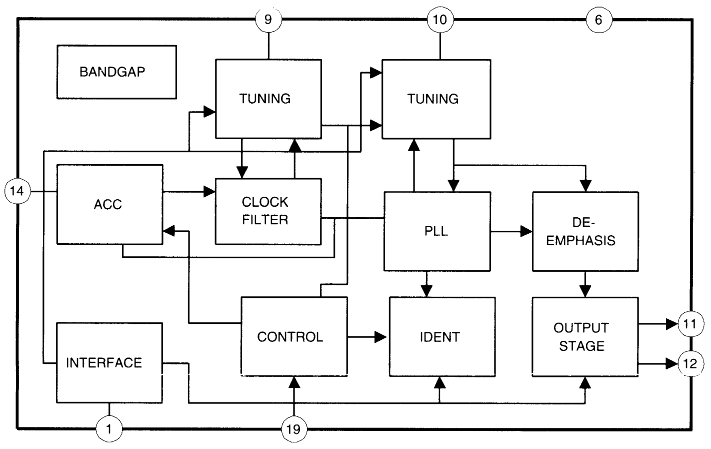
Ref.No.	Pin No.	Voltage (V)
IC401	1-5	4.5
	7-11	4.5
	13-17	4.5
	19-20	4.0
	22-33	4.5
	35	5.5
	37	5.5
	38-39	4.5
	40-41	4.4
	42	4.5
	43	5.4
	44	9.0
	45	5.5
	46	4.7
	47-48	4.5
IC402	2	1.8
	3	2.5
	5	8.8
	6	1.7
	7	8.8
	8	2.2

Pin No. Ref.No.	(B) Base	(C) Collector	(E) Emitter
Q401	5.7	9.0	-0.3
Q402	5.5	9.0	5.0
Q403/404	4.4	9.0	3.9

J Board IC402 TEA2114



B Board IC1301 TDA8395T/NZ

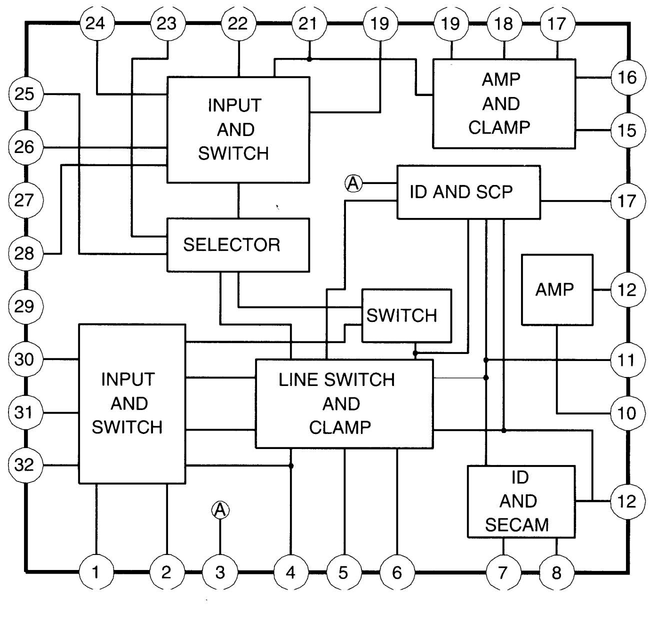

9
10
6
BANDGAP
TUNING
TUNING
14
ACC
CLOCK FILTER
PLL
DE-EMPHASIS
CONTROL
IDENT
OUTPUT STAGE
INTERFACE
11
12
1
19

Ref.No.	Pin No.	Voltage (V)
IC301	10-11	3.2
	12	1.1
	13-16	3.2
	18-20	3.2
	21	2.3
	24	1.7
	29	3.2
IC302	1	3.0
	3	0.4
	4	3.2
	6	1.4
	7-8	1.0
	9	0.4
	12	3.2
	13	0.5
	21	2.4
	22-23	3.2
	24	0.1
	25	2.2
	27	0.1
	28-29	4.2
	30	3.0
	31-35	1.2
	39	4.8
	40	2.6
	43	4.8
	45	3.1
	46	3.1
	47-48	1.6
	49	1.2
	51	1.2
	53	3.2
	60	3.1
	93	3.1
IC502	3	3.1
	5	1.0
	6	1.6
	7-9	1.0
	11	1.5
	12	3.2
	13	1.5
	15	1.8
	16	1.8
	17	1.2
	19-20	1.6
	21	3.2
	23-25	1.6
	26	1.7
	27	3.1
	28	0.3
	29	1.1
	30	1.6
	31	1.2
	32-33	1.5
	34-35	1.3
	53	3.1
	63	3.1
	65-66	3.1
	67	4.2
	68	3.1
	69	4.1
	70	3.1
	72	3.1
	73	1.6
	75	0.1
	76-77	3.1
	89	3.1
IC503	31-33	1.2
	35	1.2
	37	1.9
	40	2.0
	41-42	5.0
	43-44	3.0
	46	3.0
	48	3.0
	50	0.6
	52-53	4.8
	54	0.6
	56	4.8
	58	0.6
	60-61	4.8
	62	1.4
IC1505	2	1.2
	4	1.2
	6	1.2
	14	1.5
	16	1.5
	18	1.5
	20	4.8
IC1506	2	1.0
	4	1.0
	6	1.0
	8	1.0
	12	1.3
	14	1.4
	16	1.4
	18	1.4
	20	4.8
IC1301	1	4.4
	5	8.0
	9	3.2
	10	4.2
	11-12	2.9
	19	0.5
	20	7.0
IC1302	4	2.8
	5-6	4.2
	7	2.2
	8	0.1
	9	0.2
	10	2.4
	11	3.0
	12-13	2.8
	15	2.3
	16	0.1
	17	3.0
	19-21	2.8
	22	3.6
	24	3.6
	26	3.6
	27	8.8
	30	4.2
	31-32	4.0

All Voltages are indicated in Volts DC

Pin No. Ref.No.	(B) Base	(C) Collector	(E) Emitter
Q301	0.4	0	1.1
Q302	1.0	0	1.6
Q303	1.0	0	1.6
Q304	0.5	0	1.2
Q305	1.0	0	1.7
Q306	2.1	6.1	1.4
Q307	6.2	8.8	5.6
Q308	6.2	8.8	5.6
Q309	2.1	6.2	1.5
Q501/502/503	0.6	0	1.3
Q504	1.9	0	1.9
Q507	1.2	0	1.9
Q508	1.3	0	1.9
Q509	1.2	0	1.9
Q1301	3.4	8.8	2.8
Q1302	3.4	3.4	2.9
Q1303	0	7.5	0
Q1304	7.5	8.8	6.9
Q1307	0	8.7	0.8
Q1316	0.6	0.3	0
Q1318	3.2	0.2	3.2
Q1319	3.2	0.1	3.2

B Board IC1302 CXA1860Q


24
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31
32
INPUT AND SWITCH
AMP AND CLAMP
16
15
Ⓐ
ID AND SCP
17
SELECTOR
AMP
12
SWITCH
11
INPUT AND SWITCH
LINE SWITCH AND CLAMP
10
ID AND SECAM
12
Ⓐ
1
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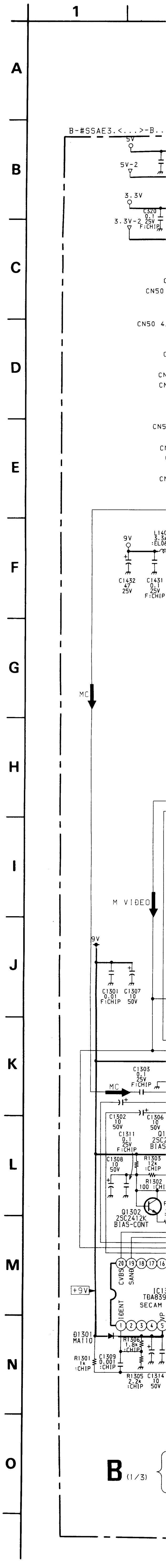
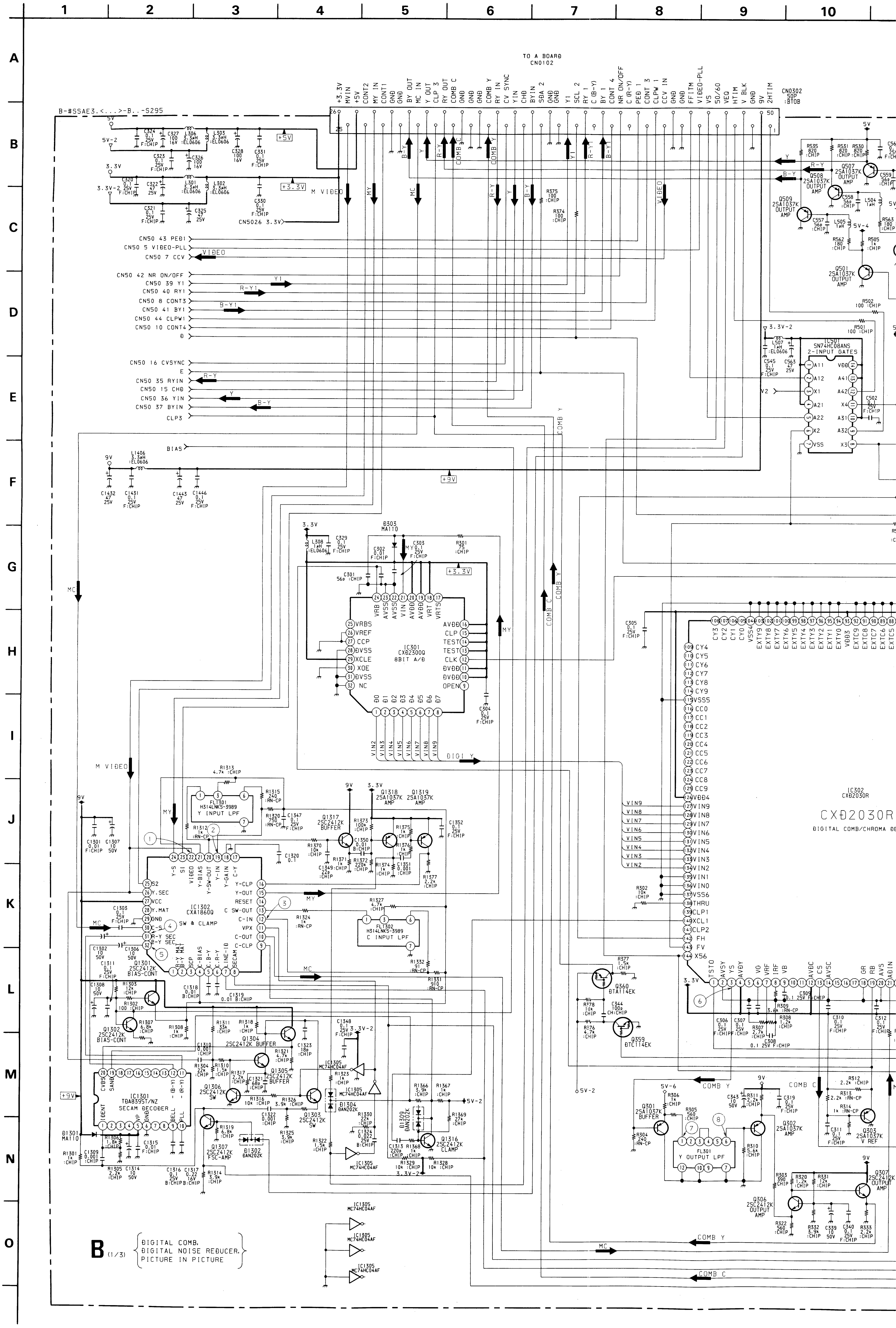
8


1
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
B-#SSAE3.<...>-B..
5V
5V-2
3.3V
3.3V-2
C320 0.1 25V F:CHIP
CN50
9V
C1432 47 25V
C1431 0.1 25V F:CHIP
MC
M VIDEO
9V
C1301 0.01 F:CHIP
C1307 10 50V
C1303 0.1 25V F:CHIP
MC
C1302 10 50V
C1306 10 50V
C1311 0.1 25V F:CHIP
C1308 10 50V
R1303 12k :CHIP
R1302 100 :CHIP
Q1302 2SC2412K BIAS-CONT
+9V
CVBS
SAND
IDENT
TDA839
SECAM
D1301 MA110
R1301 1k :CHIP
C1309 0.001 :CHIP
R1306 1.8k :CHIP
R1305 2.2k :CHIP
C1314 10 50V
B (1/3)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A
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M
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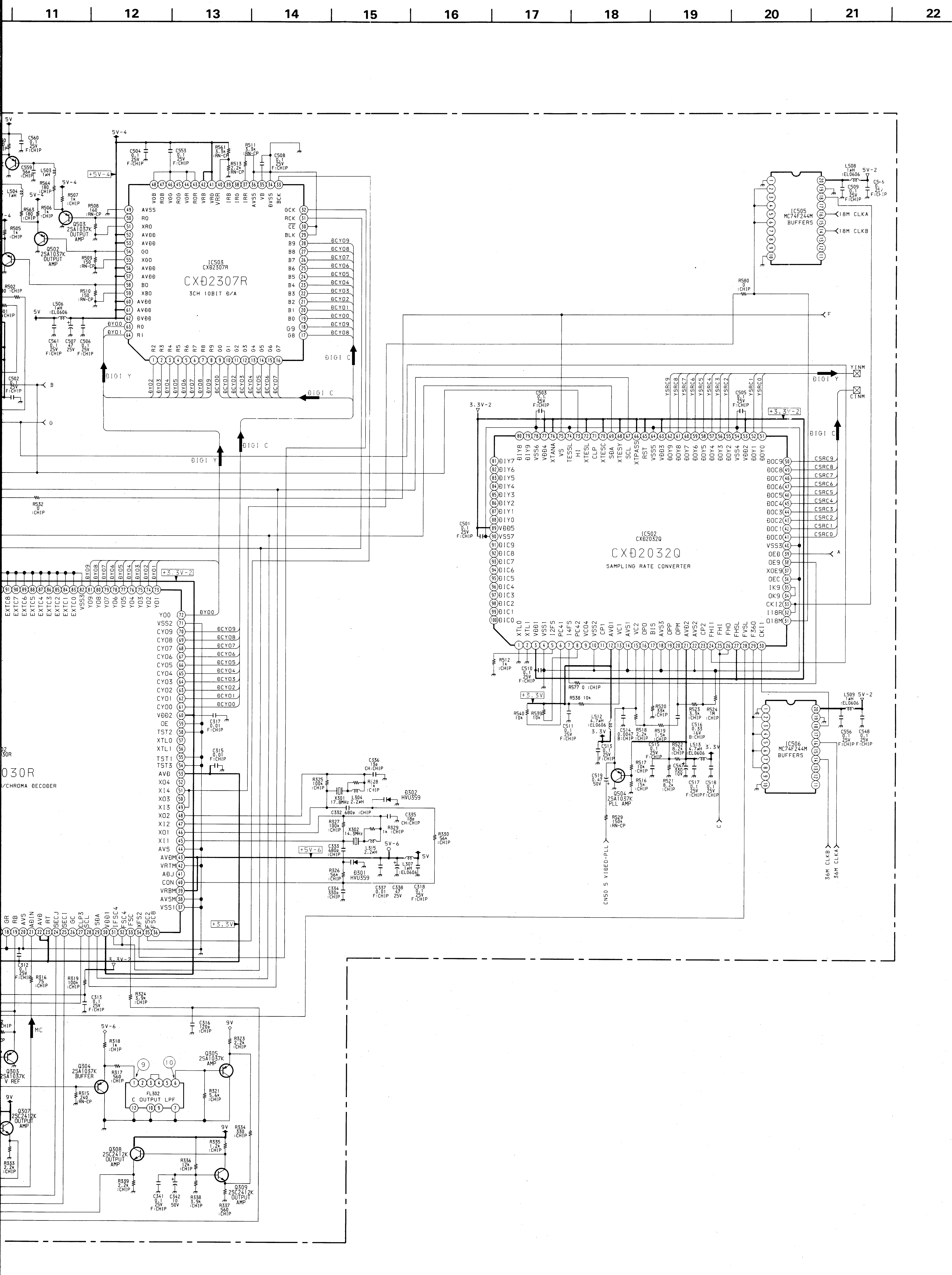
O
TO A BOARD
CN0102
CN0302
50P
:BTOB
B-#SSAE3.<...>-B..-S295
+5V
+3.3V
M VIDEO
CN5026 3.3V
CN50 43 PED1
CN50 5 VIDEO-PLL
CN50 7 CCV
CN50 42 NR ON/OFF
CN50 39 Y1
CN50 40 RY1
CN50 8 CONT3
CN50 41 BY1
CN50 44 CLPW1
CN50 10 CONT4
CN50 16 CVSYNC
CN50 35 RYIN
CN50 15 CHD
CN50 36 YIN
CN50 37 BYIN
CLP3
BIAS
+9V
IC301
CXD2300Q
8BIT A/D
IC302
CXD2030R
DIGITAL COMB/CHROMA DE
IC1302
CXA1860Q
SW & CLAMP
IC1301
TDA8395T/NZ
SECAM DECODER
FL1301
H314LNKS-3989
Y INPUT LPF
FL1302
H314LNKS-3989
C INPUT LPF
FL301
Y OUTPUT LPF
IC501
SN74HC08ANS
2-INPUT GATES
IC1305
MC74HC04AF
DIGI Y
COMB Y
COMB C
MC
MY
5V-2
3.3V-2

B (1/3) DIGITAL COMB, DIGITAL NOISE REDUCER, PICTURE IN PICTURE



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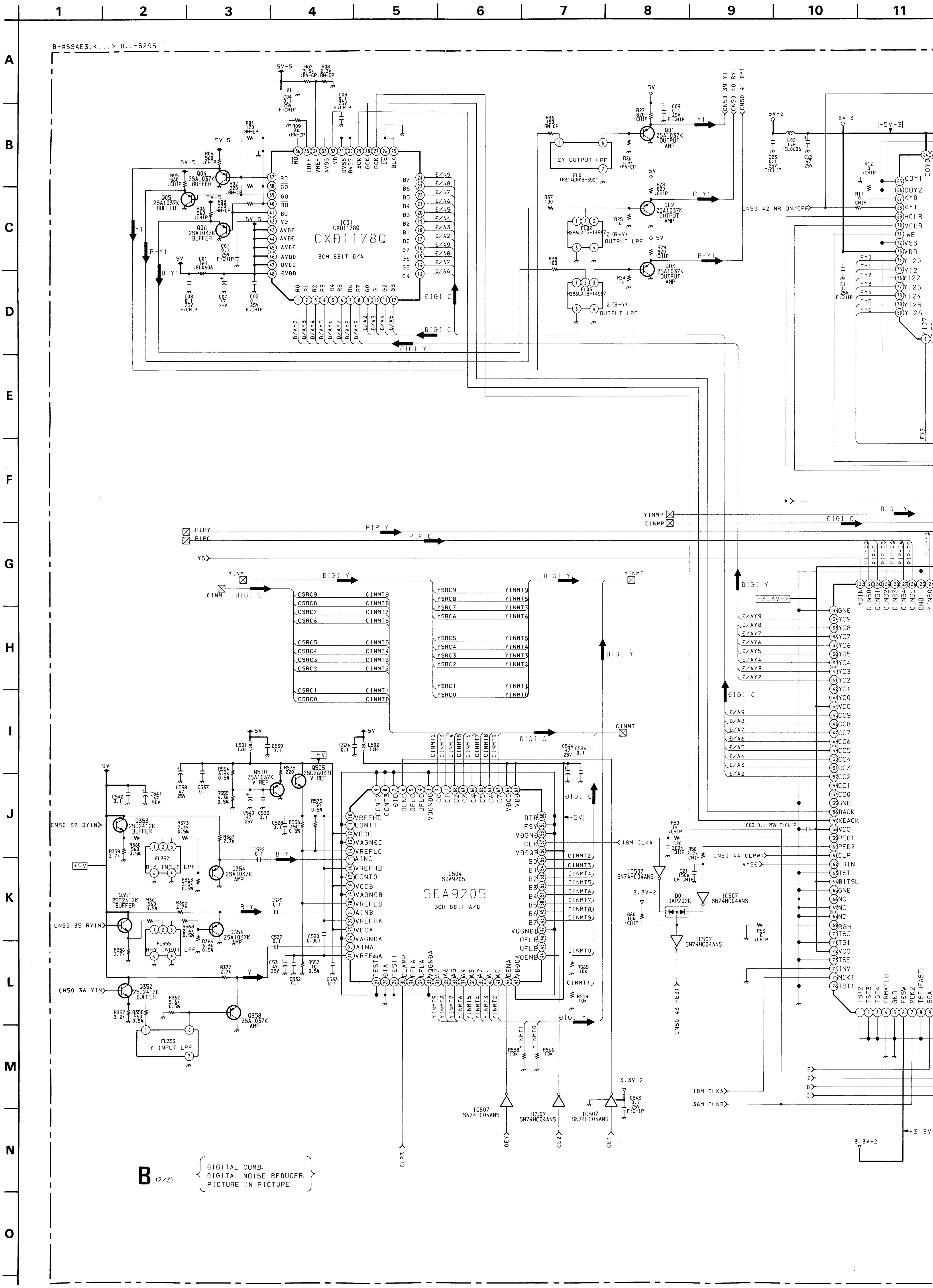
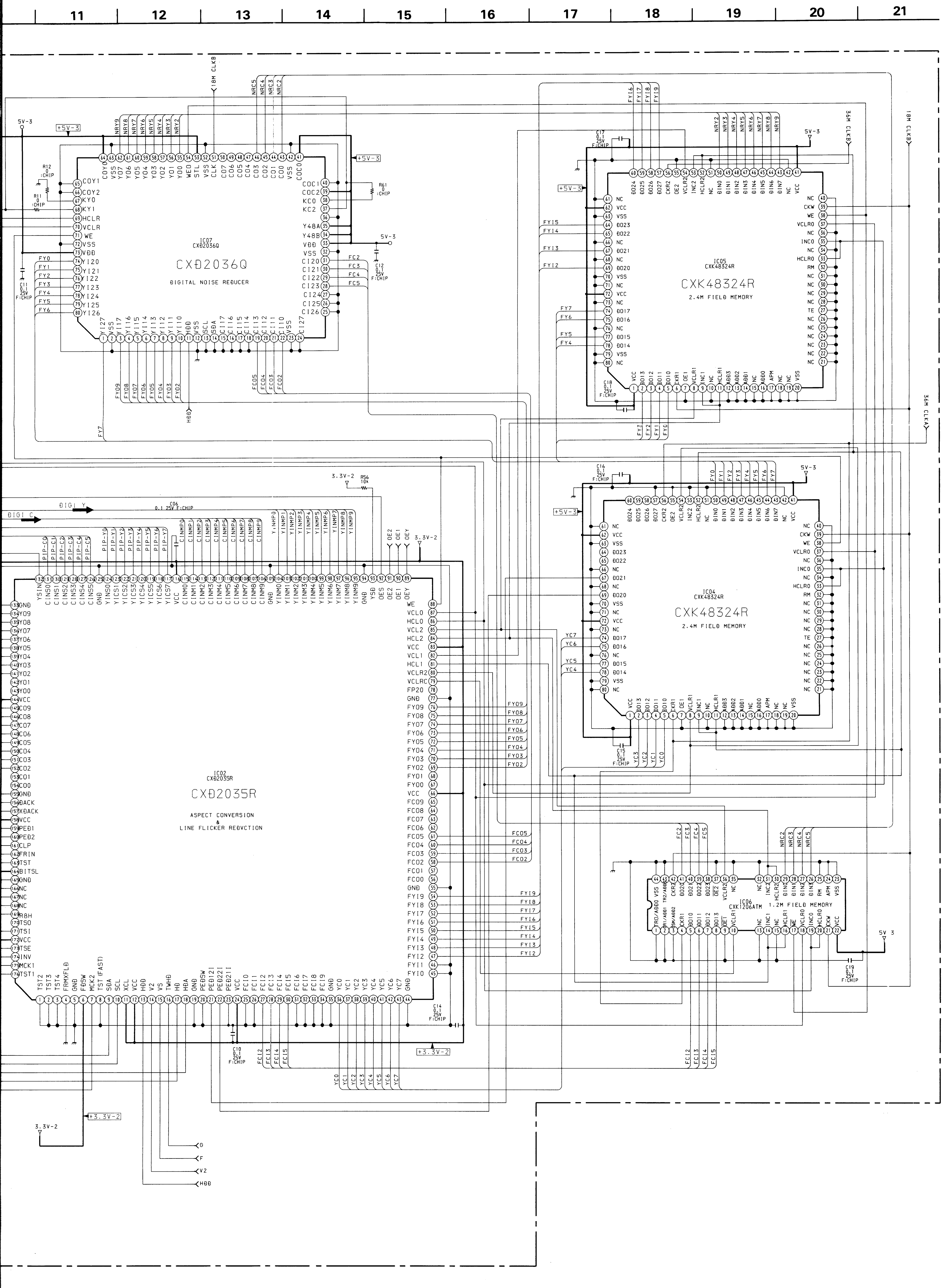
21
22
IC503
CXD2307R
3CH 10BIT D/A
IC502
CXD2032Q
SAMPLING RATE CONVERTER
IC505
MC74F244M
BUFFERS
IC506
MC74F244M
BUFFERS
18M CLKA
18M CLKB
36M CLKB
36M CLKA
DIGI Y
DIGI C
YINM
CINM
+5V-4
+3.3V-2
+3.3V
+5V-6
5V-4
5V-2
5V-6
3.3V-2
9V
030R
/CHROMA DECODER
Q503
2SA1037K
OUTPUT AMP
Q502
2SA1037K
OUTPUT AMP
Q504
2SA1037K
PLL AMP
Q303
2SA1037K
V REF
Q304
2SA1037K
BUFFER
Q305
2SA1037K
AMP
Q307
2SC2412K
OUTPUT AMP
Q308
2SC2412K
OUTPUT AMP
Q309
2SC2412K
OUTPUT AMP
FL302
C OUTPUT LPF
X301
17.8MHz
X302
14.3MHz
D302
HVU359
D301
HVU359
CN50 5 VIDEO-PLL
MC


1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H I J K L M N O
B-#SSAE3.<...>-B..-S295
IC01 CXD1178Q 3CH 8BIT D/A
CXD1178Q
Q04 2SA1037K BUFFER
Q05 2SA1037K BUFFER
Q06 2SA1037K BUFFER
Q01 2SA1037K OUTPUT AMP
Q02 2SA1037K OUTPUT AMP
Q03 2SA1037K OUTPUT AMP
FL01 TH314LNKS-3991 2Y OUTPUT LPF
FL02 4286LAIS-14987 2 (R-Y) OUTPUT LPF
FL03 4286LAIS-14987 2 (B-Y) OUTPUT LPF
CN50 39 Y1
CN50 40 RY1
CN50 41 BY1
CN50 42 NR ON/OFF
DIGI C
DIGI Y
PIP Y
PIP C
YS
YINM
CINM
YINMP
CINMP
YINMT
CINMT
IC504 SDA9205 3CH 8BIT A/D
SDA9205
Q510 2SA1037K V REF
Q505 2SC2603TF V REF
Q353 2SC2412K BUFFER
Q351 2SC2412K BUFFER
Q352 2SC2412K BUFFER
Q354 2SA1037K AMP
Q356 2SA1037K AMP
Q358 2SA1037K AMP
FL352 B-Y INPUT LPF
FL355 R-Y INPUT LPF
FL353 Y INPUT LPF
CN50 37 BYIN
CN50 35 RYIN
CN50 36 YIN
18M CLKA
36M CLKB
CN50 44 CLPWI
VYSD
CN50 43 PEDI
D01 DAP202K
IC507 SN74HC04ANS
OEY
OE2
OE1
CLP3
+5V
+9V
+3.3V-2
+5V-3
5V-5
3.3V-2

B (2/3)

DIGITAL COMB.
DIGITAL NOISE REDUCER.
PICTURE IN PICTURE


11
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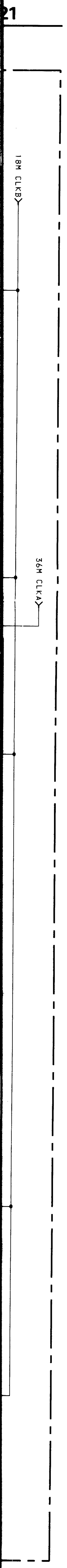
21
IC07
CXD2036Q
DIGITAL NOISE REDUCER
IC05
CXK48324R
2.4M FIELD MEMORY
IC04
CXK48324R
2.4M FIELD MEMORY
IC02
CXD2035R
ASPECT CONVERSION
&
LINE FLICKER REDUCTION
IC06
CXK1206ATM
1.2M FIELD MEMORY
18M CLKB
36M CLKB
36M CLKA
5V-3
+5V-3
3.3V-2
+3.3V-2
DIGI Y
DIGI C
C04
0.1 25V F:CHIP
R56
10k
R12
0
:CHIP
R11
0
:CHIP
R61
0
:CHIP
C11
0.1
25V
F:CHIP
C12
0.1
25V
F:CHIP
C17
0.1
25V
F:CHIP
C18
0.1
25V
F:CHIP
C16
0.1
25V
F:CHIP
C15
0.1
25V
F:CHIP
C19
0.1
25V
F:CHIP
C14
0.1
25V
F:CHIP
C10
0.1
25V
F:CHIP
HDD
G
F
V2
HDD



Ref.No.	Pin No.	Voltage (V)
IC01	27	1.2
	28-29	1.5
	32	1.1
	34-35	1.9
	37	0.3
	39	1.1
	41	1.1
	42	3.0
	43-48	4.8
IC02	6	3.1
	7	1.3
	9-10	4.2
	11-12	3.0
	13	1.6
	15	0.1
	16	1.6
	17	1.7
	18	1.6
	21-22	0
	24	3.1
	66	3.1
	79-82	0
	83	3.0
	84-87	0
	88	0.7
	89-91	3.0
	92-93	0
	132	0
	144	3.1
	156	1.5
	157	3.1
	158-159	0
	160	0.1
	164	3.1
	172	3.1
	175	1.5
IC04	1	4.8
	6	1.2
	8-9	0
	11	0
	38	0.7
	39	1.3
	41	4.8
	56	1.5
	62	4.8
	72	4.8
IC05	1	4.8
	6	1.4
	38	1.0
	39	1.4
	41	4.8
	56	1.2
	62	4.8
	72	4.8

Ref.No.	Pin No.	Voltage (V)
IC06	4	1.3
	10	0
	17	1.0
	21	1.2
	22	4.8
	42	1.3
IC07	11	1.6
	33-35	4.8
	39	4.8
	41	4.8
	51	1.4
	53	4.8
	54	1.0
	64	4.8
	71	0.7
	73	4.8

Pin No. Ref.No.	(B) Base	(C) Collector	(E) Emitter
Q01	0.8	0	1.5
Q02/03	1.6	0	2.2
Q04	0.3	0	0.9
Q05/06	1.1	0	1.9

Ref.No.	Pin No.	Voltage (V)
IC571	2	2.3
	3	2.8
	5	4.1
	7	4.7
	9	3.9
	10	3.8
	11	2.6
	12	2.1
	13	4.8
IC1303	1	4.5
	5	8.0
	9	3.2
	10	4.2
	11-12	3.0
IC1304	3	0.4
	4	2.6
	5-6	3.8
	7	2.2
	8	0.1
	9	0.2
	10	2.0
	11	3.0
	12	2.6
	13	2.3
	15	2.3
	16	0.2
	17	2.5
	19	2.8
	20	3.0
	21	2.7
	22	3.6
	26	3.6
	27	8.8
	28	3.4
	30	3.6
	31-32	4.0
IC1401	1	3.2
	7	0.2
	8	2.2
	10	2.8
	13	5.0
	15	5.0
	16-17	3.2
	18-19	1.7
	20	1.4
	23	1.4
	25	1.4
	26	0.9
	27	3.2
	28	4.5
	29	0.2
	30	4.1
	31	0.1
	34	1.4
	36	1.4
	37-38	1.1
	39	1.2
	40	3.3
	41	1.1
	42	3.2
	44	1.8
	46	3.2
	52	3.2
	73	3.2
	107	4.1
	108	4.0
	109	3.2
	111	1.8
	112	3.2
	115	1.7
	118	2.3
	119-121	3.3
	124	1.7
	128-129	3.3
	131	0.9
IC1402	1	4.8
	2	2.4
	3	4.0
	4	4.8
	5-6	2.4
	9	4.5
	10	4.8
	11	2.4
	12	4.0
	13-14	4.8
IC1403	4	1.4
	21	1.8
	22	4.8
	24	4.8
	37	4.8

Pin No. Ref.No.	(B) Base	(C) Collector	(E) Emitter
Q1308	3.3	8.8	2.7
Q1309	0	7.6	0
Q1310	7.6	8.8	6.9
Q1311	3.3	7.6	2.8
Q1313	0.2	8.8	0.8
Q1314	4.1	0.2	0
Q1315	0	4.4	0
Q1401	1.0	0	1.7
Q1402	1.0	0	1.4
Q1403	1.0	3.3	1.4
Q1404	3.3	8.8	4.0
Q1405	4.0	0	4.5

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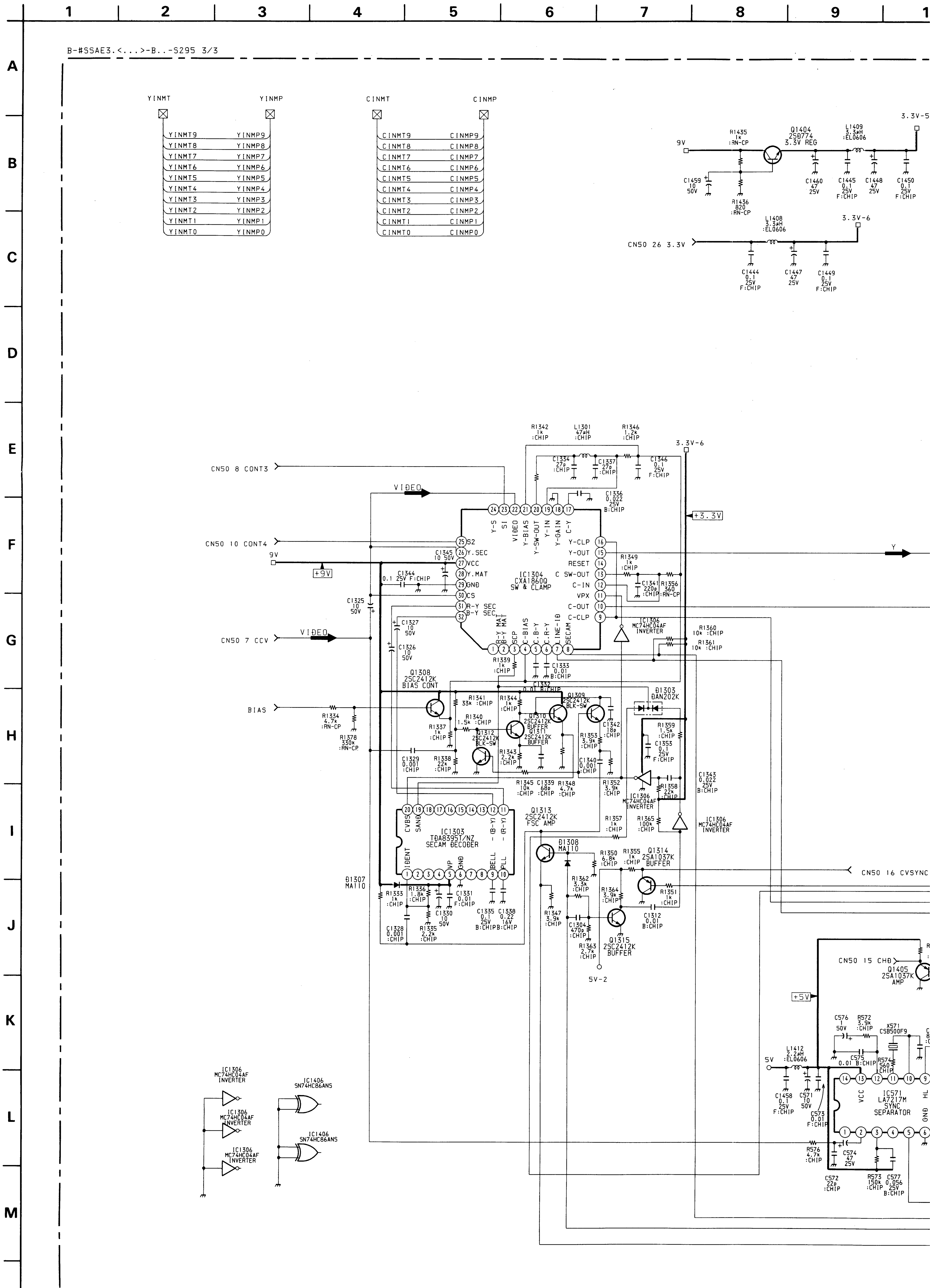
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A
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C
D
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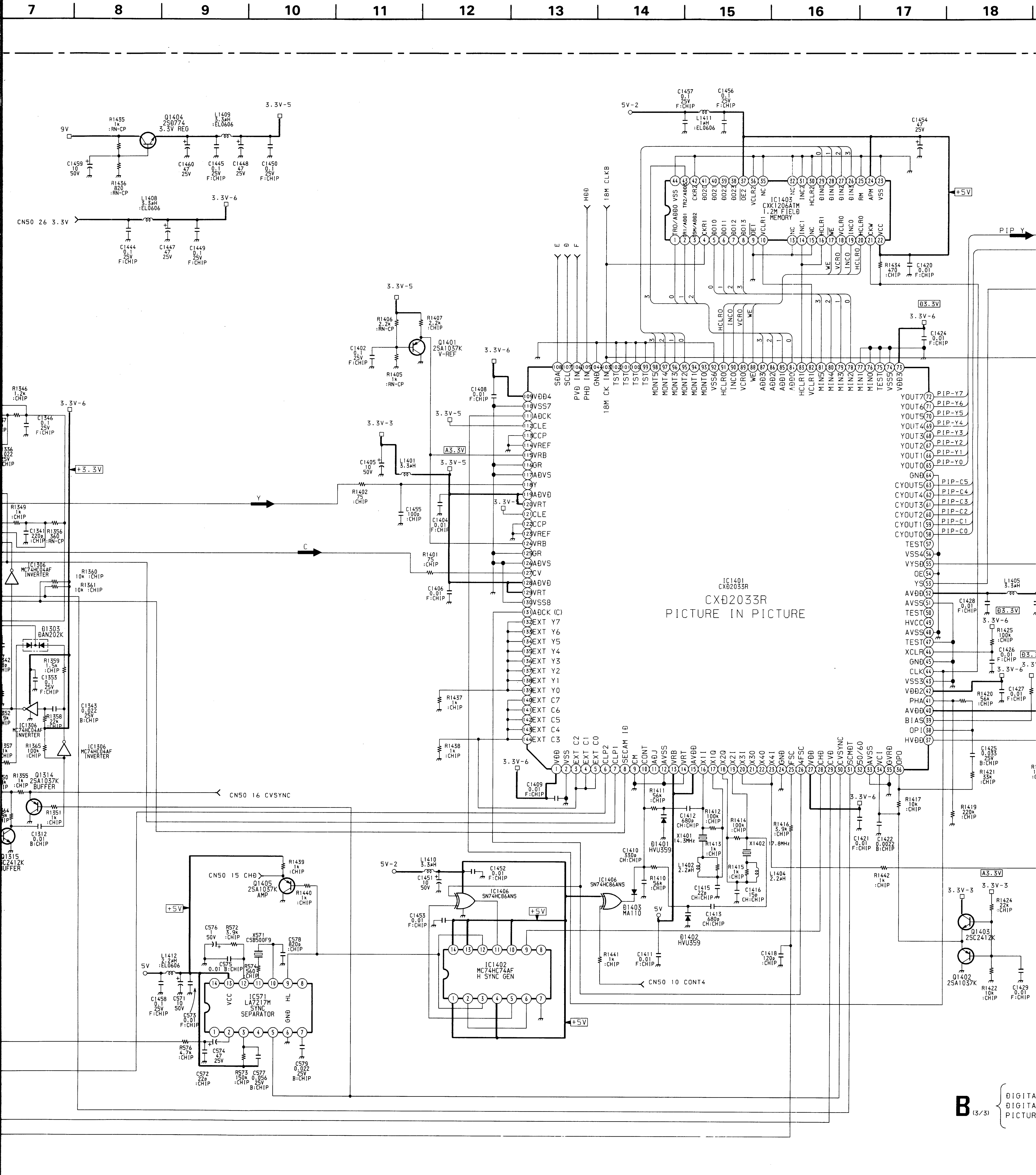
I
J
K
L
M
N
O
B-#SSAE3.<...>-B..-S295 3/3
YINMT
YINMP
CINMT
CINMP
YINMT9 YINMP9
YINMT8 YINMP8
YINMT7 YINMP7
YINMT6 YINMP6
YINMT5 YINMP5
YINMT4 YINMP4
YINMT3 YINMP3
YINMT2 YINMP2
YINMT1 YINMP1
YINMT0 YINMP0
CINMT9 CINMP9
CINMT8 CINMP8
CINMT7 CINMP7
CINMT6 CINMP6
CINMT5 CINMP5
CINMT4 CINMP4
CINMT3 CINMP3
CINMT2 CINMP2
CINMT1 CINMP1
CINMT0 CINMP0
9V
R1435 1k :RN-CP
Q1404 2SB774 3.3V REG
L1409 3.3µH :EL0606
3.3V-5
C1459 10 50V
R1436 820 :RN-CP
C1460 47 25V
C1445 0.1 25V F:CHIP
C1448 47 25V
C1450 0.1 25V F:CHIP
L1408 3.3µH :EL0606
3.3V-6
CN50 26 3.3V
C1444 0.1 25V F:CHIP
C1447 47 25V
C1449 0.1 25V F:CHIP
R1342 1k :CHIP
L1301 47µH :CHIP
R1346 1.2k :CHIP
3.3V-6
C1334 27p :CHIP
C1337 27p :CHIP
C1346 0.1 25V F:CHIP
CN50 8 CONT3
C1336 0.022 25V B:CHIP
VIDEO
+3.3V
Y-S
S1
VIDEO
Y-BIAS
Y-SW-OUT
Y-IN
Y-GAIN
C-Y
CN50 10 CONT4
S2
Y.SEC
VCC
Y.MAT
GND
CS
R-Y SEC
B-Y SEC
Y-CLP
Y-OUT
RESET
C SW-OUT
C-IN
VPX
C-OUT
C-CLP
IC1304 CXA1860Q SW & CLAMP
9V
+9V
C1345 10 50V
C1344 0.1 25V F:CHIP
R1349 1k :CHIP
C1341 220p :CHIP
R1356 360 :RN-CP
Y
C1325 10 50V
R-Y MAT
B-Y MAT
SCP
C-BIAS
C-B-Y
C-R-Y
LINE-ID
SECAM
IC1306 MC74HC04AF INVERTER
R1360 10k :CHIP
R1361 10k :CHIP
C1327 10 50V
CN50 7 CCV
VIDEO
C1326 10 50V
R1339 1k :CHIP
C1333 0.01 B:CHIP
C1332 0.01 B:CHIP
Q1308 2SC2412K BIAS CONT
BIAS
R1334 4.7k :RN-CP
R1378 330k :RN-CP
R1341 33k :CHIP
R1344 1k :CHIP
Q1309 2SC2412K BLK-SW
D1303 DAN202K
R1340 1.5k :CHIP
R1337 1k :CHIP
Q1310 2SC2412K BUFFER
Q1311 2SC2412K BUFFER
Q1312 2SC2412K BLK-SW
R1353 3.9k :CHIP
C1342 18p :CHIP
R1359 1.5k :CHIP
C1353 0.1 25V F:CHIP
C1329 0.001 :CHIP
R1338 22k :CHIP
R1343 2.2k :CHIP
C1340 0.001 :CHIP
C1343 0.022 25V B:CHIP
R1345 10k :CHIP
C1339 68p :CHIP
R1348 4.7k :CHIP
R1352 3.9k :CHIP
IC1306 MC74HC04AF INVERTER
R1358 22k :CHIP
CVBS
SAND
IC1303 TDA8395T/NZ SECAM DECODER
-(B-Y)
-(R-Y)
IDENT
VP
GND
BELL
PLL
Q1313 2SC2412K FSC AMP
R1357 1k :CHIP
R1365 100k :CHIP
IC1306 MC74HC04AF INVERTER
D1308 MA110
R1350 6.8k :CHIP
R1355 1k :CHIP
Q1314 2SA1037K BUFFER
CN50 16 CVSYNC
D1307 MA110
R1333 1k :CHIP
R1336 1.8k :CHIP
C1331 0.01 F:CHIP
C1330 10 50V
C1335 0.1 25V B:CHIP
C1338 0.22 16V B:CHIP
R1362 3.3k :CHIP
R1364 3.9k :CHIP
R1351 1k :CHIP
C1328 0.001 :CHIP
R1335 2.2k :CHIP
R1347 3.9k :CHIP
C1304 470p :CHIP
R1363 2.7k :CHIP
C1312 0.01 B:CHIP
Q1315 2SC2412K BUFFER
5V-2
CN50 15 CHD
Q1405 2SA1037K AMP
+5V
C576 1 50V
R572 3.9k :CHIP
X571 CSB500F9
C575 0.01 B:CHIP
R574 560 :CHIP
L1412 2.2µH :EL0606
5V
VCC
IC571 LA7217M SYNC SEPARATOR
HL
GND
C1458 0.1 25V F:CHIP
C571 10 50V
C573 0.01 F:CHIP
R576 4.7k :CHIP
C574 47 25V
C572 22p :CHIP
R573 150k :CHIP
C577 0.056 25V B:CHIP
IC1306 MC74HC04AF INVERTER
IC1306 MC74HC04AF INVERTER
IC1306 MC74HC04AF INVERTER
IC1406 SN74HC86ANS
IC1406 SN74HC86ANS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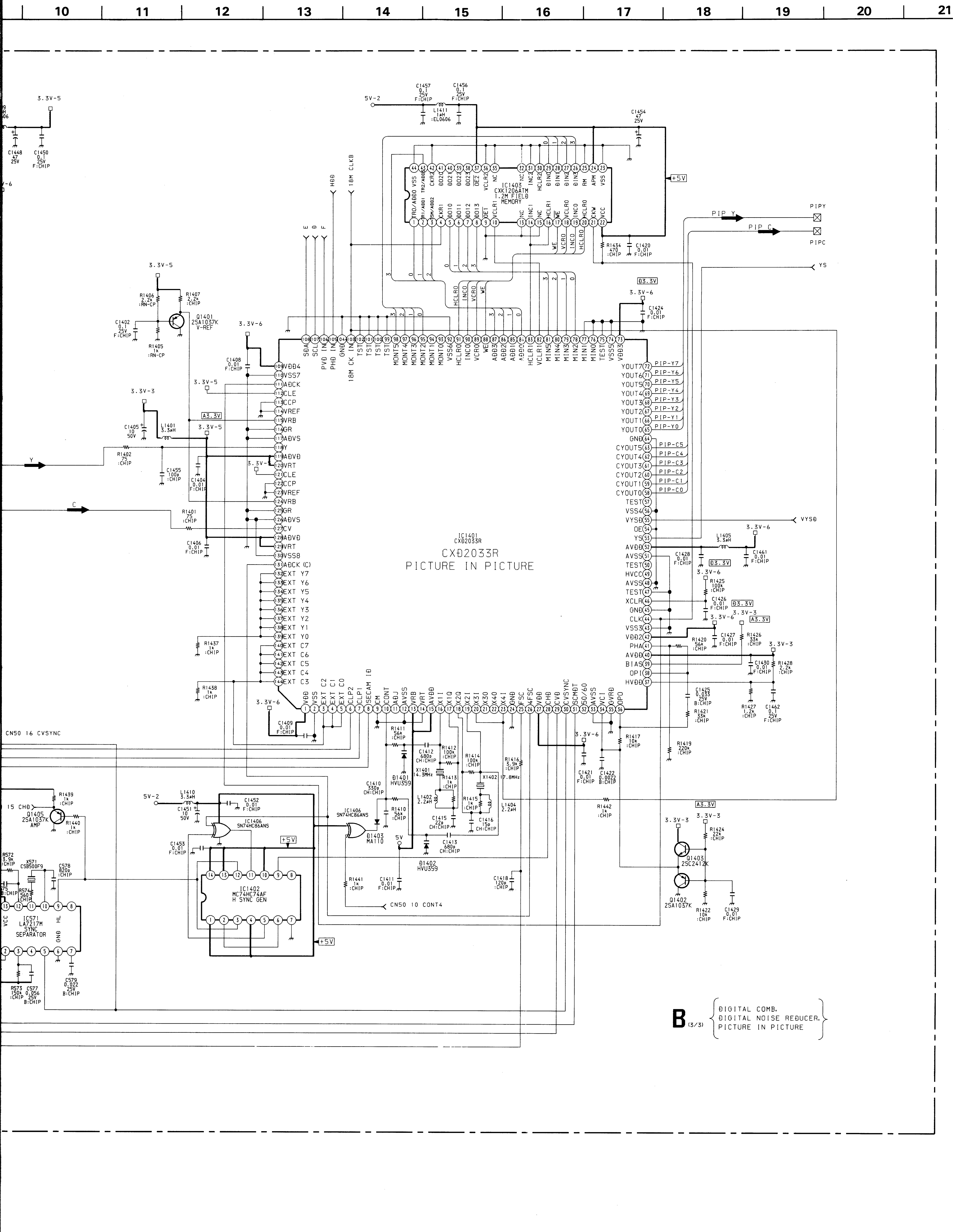
IC1401
CXD2033R
PICTURE IN PICTURE
IC1403
CXK1206ATM
1.2M FIELD
MEMORY
IC1402
MC74HC74AF
H SYNC GEN
IC1406
SN74HC86ANS
IC571
LA7217M
SYNC
SEPARATOR
IC1306
MC74HC04AF
INVERTER
Q1404
2SD774
3.3V REG
Q1401
2SA1037K
V-REF
Q1405
2SA1037K
AMP
Q1314
2SA1037K
BUFFER
Q1315
2SC2412K
BUFFER
Q1403
2SC2412K
Q1402
2SA1037K
D1303
DAN202K
D1401
HVU359
D1402
HVU359
D1403
MA110
X1401
14.3MHz
X1402
17.8MHz
X571
CSB500F9
CN50 26 3.3V
CN50 16 CVSYNC
CN50 15 CHD
CN50 10 CONT4
PIP Y
Y
C
+5V
+3.3V
A3.3V
D3.3V
3.3V-3
3.3V-5
3.3V-6
5V-2
9V
5V
HD
18M CLKB
E
D
F
PIP-Y7
PIP-Y6
PIP-Y5
PIP-Y4
PIP-Y3
PIP-Y2
PIP-Y1
PIP-Y0
PIP-C5
PIP-C4
PIP-C3
PIP-C2
PIP-C1
PIP-C0
B (3/3)
DIGITA
DIGITA
PICTUR


10
11
12
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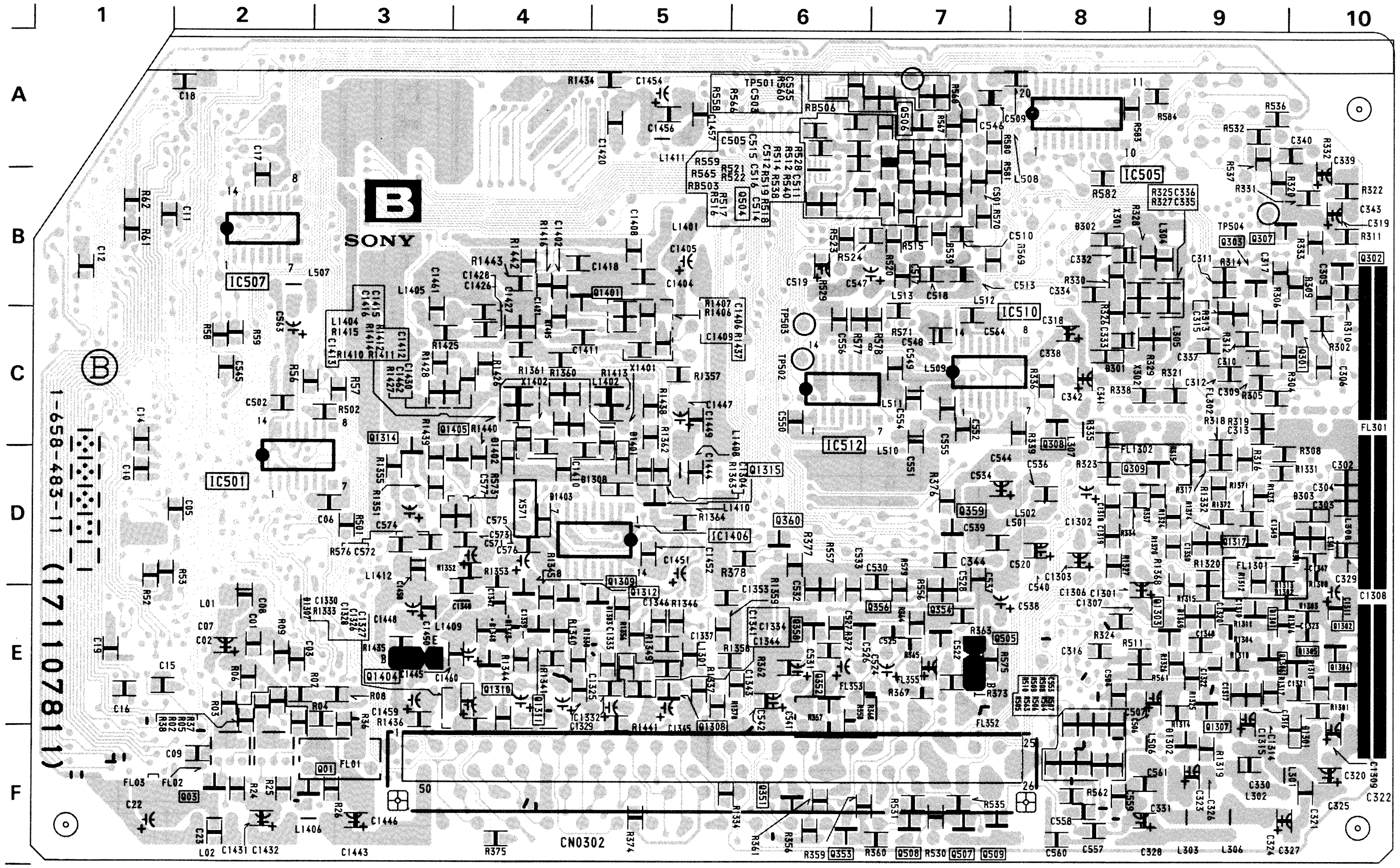
14
15
16
17
18
19
20
21
IC1401
CXD2033R
CXD2033R
PICTURE IN PICTURE
IC1403
CXK1206ATM
1.2M FIELD
MEMORY
IC1402
MC74HC74AF
H SYNC GEN
IC1406
SN74HC86ANS
IC571
LA7217M
SYNC
SEPARATOR
Q1401
2SA1037K
V-REF
Q1405
2SA1037K
AMP
Q1403
2SC2412K
Q1402
2SA1037K
D1401
HVU359
D1402
HVU359
D1403
MA110
X1401
14.3MHz
X1402
17.8MHz
X571
CSB500F9
PIPY
PIPC
PIP Y
PIP C
YS
VYSD
HSD
18M CLKB
Y
C
5V-2
3.3V-3
3.3V-5
3.3V-6
+5V
A3.3V
D3.3V
CN50 16 CVSYNC
CN50 10 CONT4
15 CHD
PIP-Y7
PIP-Y6
PIP-Y5
PIP-Y4
PIP-Y3
PIP-Y2
PIP-Y1
PIP-Y0
PIP-C5
PIP-C4
PIP-C3
PIP-C2
PIP-C1
PIP-C0

B (3/3) DIGITAL COMB.
DIGITAL NOISE REDUCER.
PICTURE IN PICTURE

B [DIGIAL COMB, DIGITAL NOISE REDUCER, PICTURE IN PICTURE]

— B Board — <Conductor Side>


1
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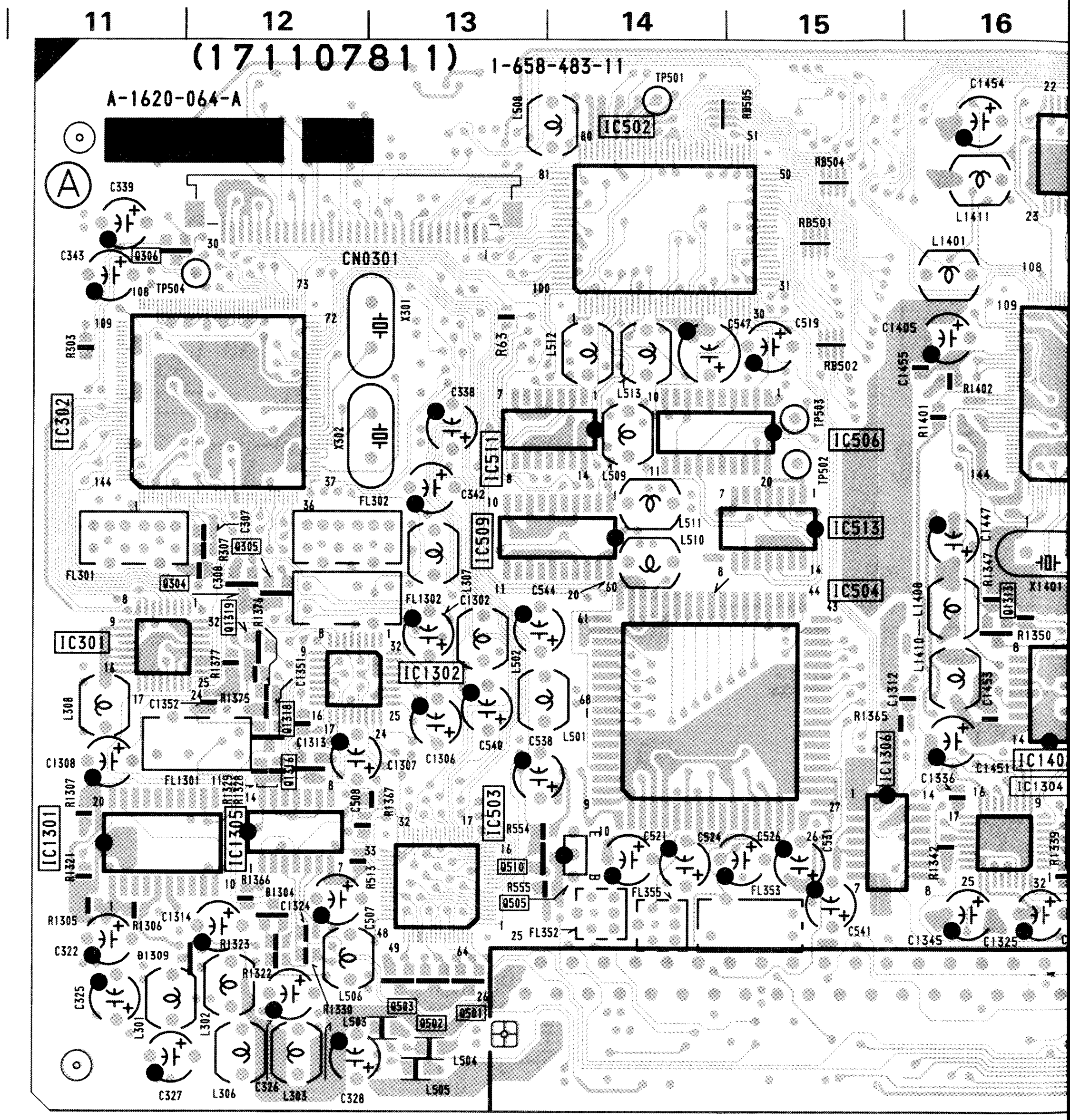
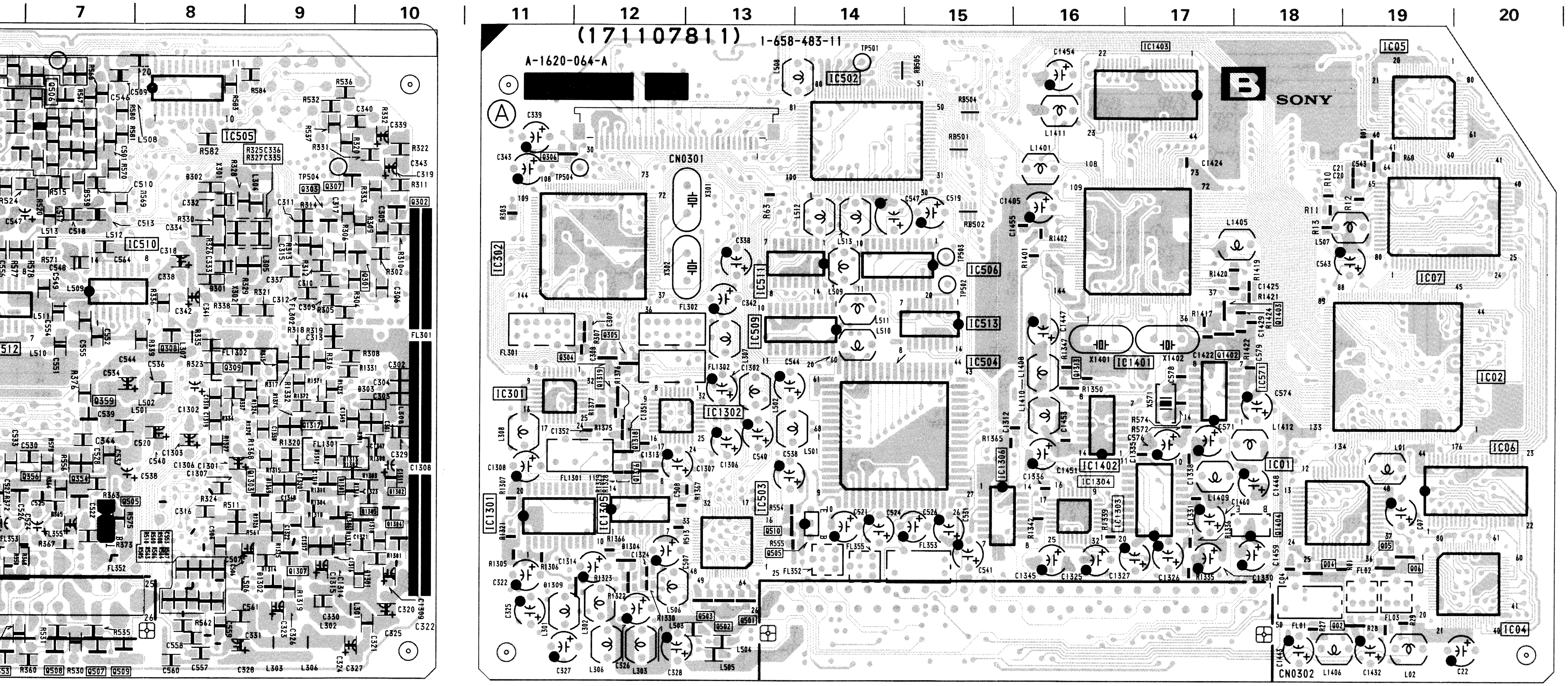
10
A
B
C
D
E
F
SONY
IC501
IC507
IC505
IC510
IC512
CN0302
1-658-483-11
(171107811)

— B Board — <Component Side>


11
12
13
14
15
16
(171107811)
1-658-483-11
A-1620-064-A
CN0301
IC301
IC302
IC502
IC503
IC504
IC506
IC509
IC511
IC513
IC1301
IC1302
IC1305
IC1306

— B Board — <Component Side>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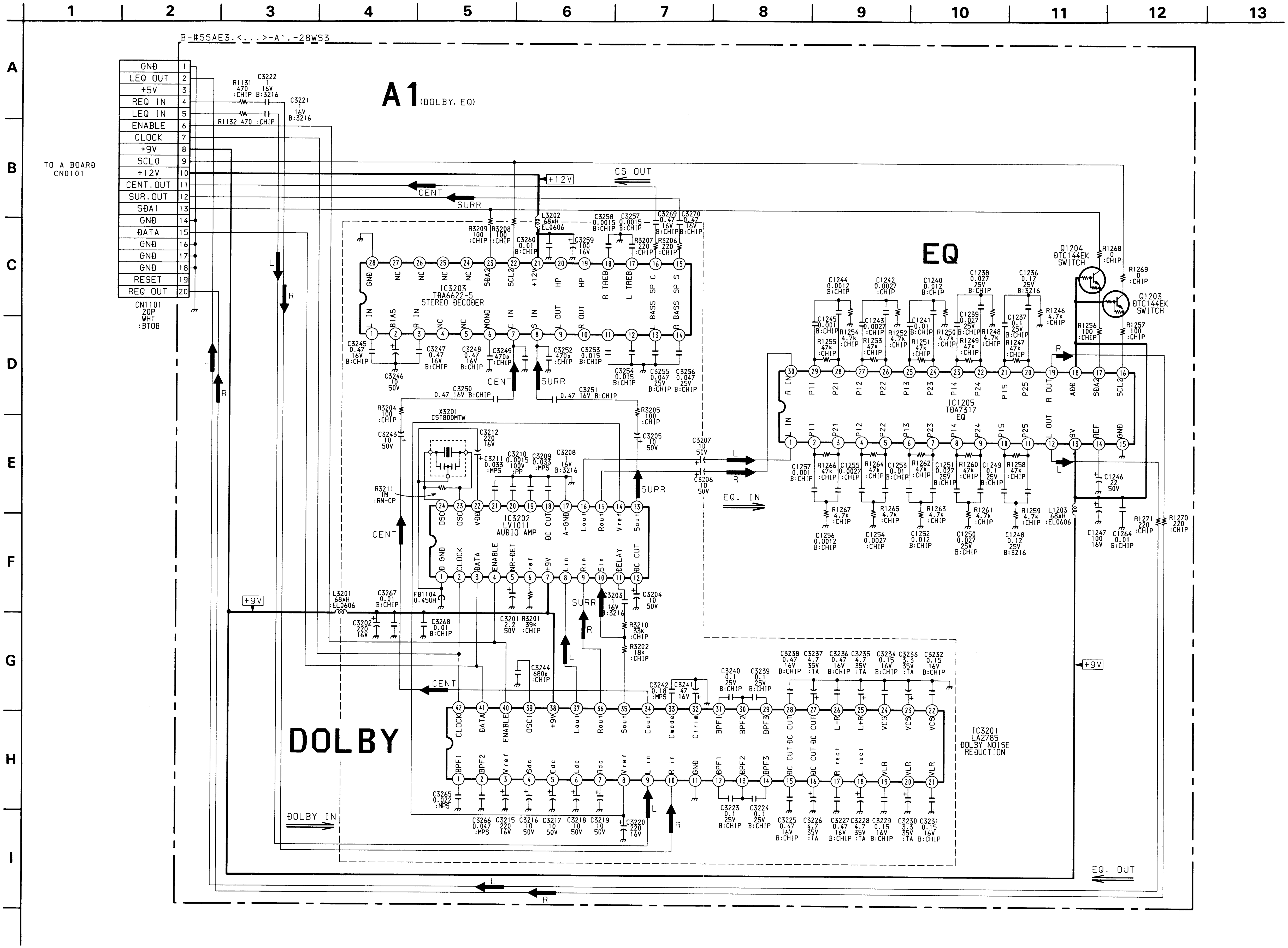
16
17
18
19
20
(171107811)
1-658-483-11
A-1620-064-A
B
SONY
CN0301
CN0302
IC05
IC502
IC1403
IC505
IC510
IC302
IC506
IC513
IC504
IC509
IC511
IC301
IC1302
IC1301
IC1305
IC503
IC1401
IC1402
IC1304
IC1306
IC1303
IC571
IC07
IC02
IC06
IC01
IC04

B BOARD

IC	
IC01	D-18
IC02	D-20
IC04	F-20
IC05	A-19
IC06	D-20
IC07	C-19
IC301	D-11
IC302	C-11
IC501	D-2
IC502	A-14
IC503	E-13
IC504	D-15
IC505	A-8
IC506	C-15
IC507	B-2
IC571	D-18
IC1301	E-11
IC1302	D-13
IC1303	E-17
IC1304	E-16
IC1305	E-12
IC1306	D-15
IC1401	D-17
IC1402	D-16
IC1403	A-17
IC1406	D-5

TRANSISTOR	
Q01	F-3
Q02	F-19
Q03	F-2
Q04	E-18
Q05	E-19
Q06	E-19
Q301	C-10
Q302	B-10
Q303	B-9
Q304	D-12
Q305	C-12
Q306	B-11
Q307	B-9
Q308	C-8
Q309	D-8
Q351	F-6
Q352	E-6
Q353	F-6
Q354	E-7
Q356	E-7
Q358	E-6
Q359	D-7
Q360	D-6
Q501	F-13
Q502	F-13
Q503	F-13
Q504	B-6
Q505	E-7
Q507	F-7
Q508	F-7
Q509	F-7
Q510	E-13
Q1301	E-9
Q1302	E-10
Q1303	E-9
Q1304	E-10
Q1305	E-10
Q1306	E-10
Q1307	E-9
Q1308	E-5
Q1309	D-4
Q1310	E-4
Q1311	E-4
Q1312	D-5
Q1313	D-16
Q1314	C-3
Q1315	D-6
Q1316	E-12
Q1317	D-9
Q1318	D-12
Q1319	D-12
Q1401	B-5
Q1402	C-18
Q1403	C-18
Q1404	E-3
Q1405	C-4

DIODE	
D01	A-19
D301	C-8
D302	B-8
D303	D-10
D1301	E-10
D1302	F-9
D1303	E-5
D1304	E-12
D1307	E-2
D1308	D-5
D1309	F-11
D1401	C-5
D1402	C-4
D1403	D-4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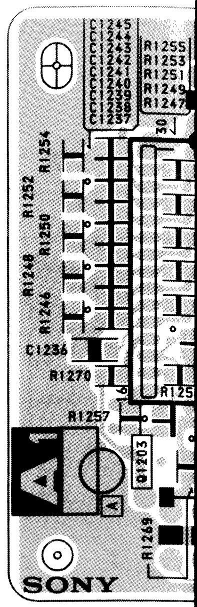
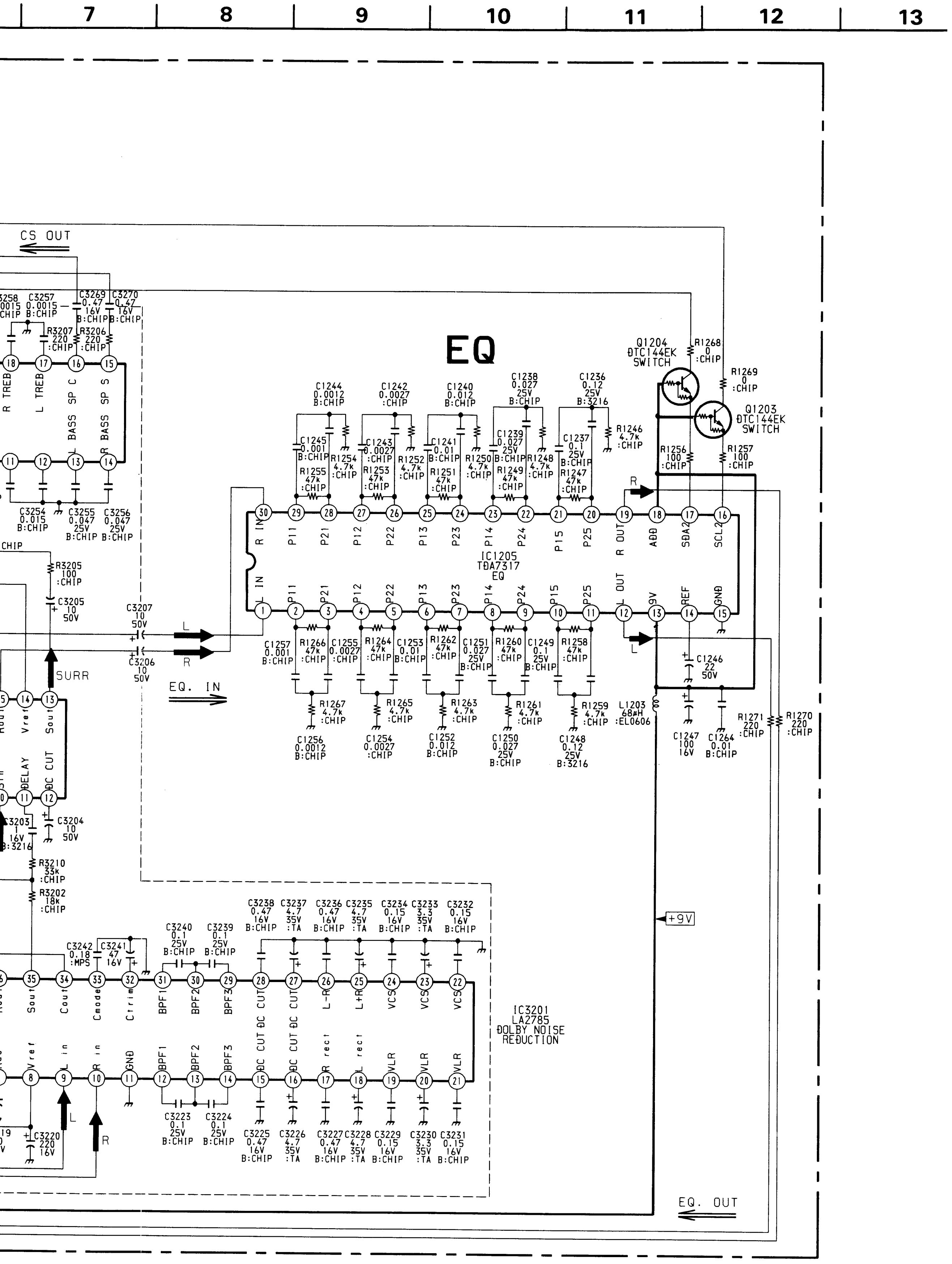
13
A
B
C
D
E
F
G
H
I
B-#SSAE3.<...>-A1.-28WS3
A1 (DOLBY, EQ)
TO A BOARD CN0101
GND 1
LEQ OUT 2
+5V 3
REQ IN 4
LEQ IN 5
ENABLE 6
CLOCK 7
+9V 8
SCLD 9
+12V 10
CENT.OUT 11
SUR.OUT 12
SDA1 13
GND 14
DATA 15
GND 16
GND 17
GND 18
RESET 19
REQ OUT 20
CN1101 20P WHT :BTOB
R1131 470 :CHIP
C3222 1 16V B:3216
C3221 1 16V B:3216
R1132 470 :CHIP
+12V
CS OUT
CENT
SURR
L
R
IC3203 TDA6622-5 STEREO DECODER
L3202 68µH EL0606
EQ
IC1205 TDA7317 EQ
Q1204 DTC144EK SWITCH
Q1203 DTC144EK SWITCH
EQ. IN
EQ. OUT
X3201 CST800MTW
IC3202 LV1011 AUDIO AMP
R3211 1M :RN-CP
FB1104 0.45UH
L3201 68µH EL0606
+9V
DOLBY
DOLBY IN
IC3201 LA2785 DOLBY NOISE REDUCTION
L1203 68µH EL0606

A1 [DOLBY,

— A1 Board —

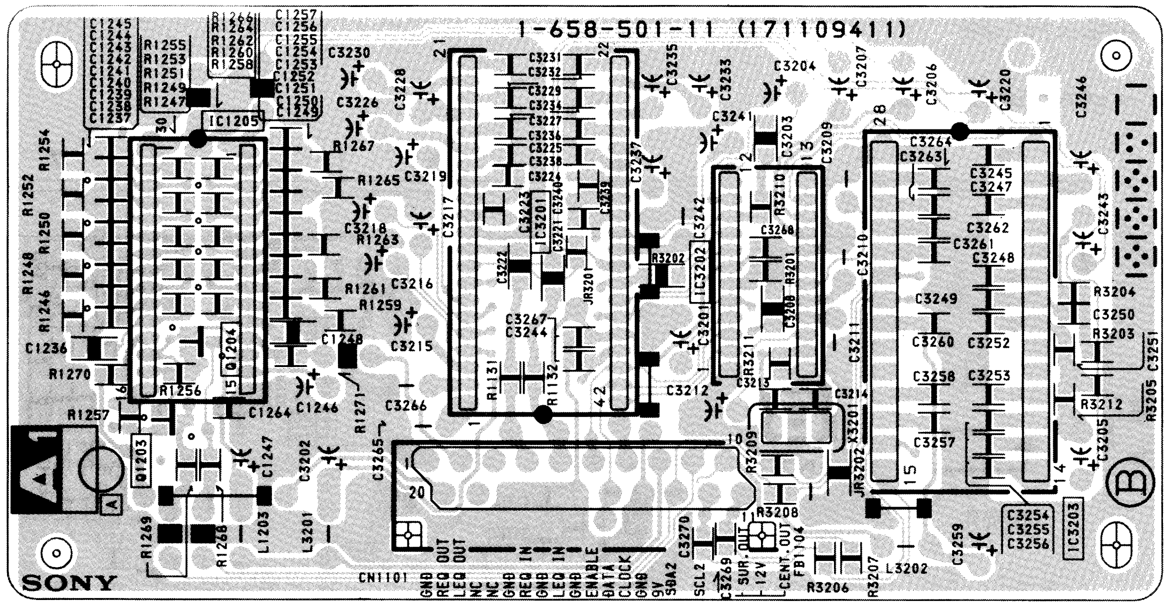

C1245
C1244
C1243
C1242
C1241
C1240
C1239
C1238
C1237
R1255
R1253
R1251
R1249
R1247
R1254
R1252
R1250
R1248
R1246
C1236
R1270
R1257
R1269
Q1203
A1
SONY

Ref.No.	Pin No.
IC3201	1-10
	12-15
	16
	17
	18
	19-21
	22-24
	25
	26
	27
	28-37
	38
	40
	41
	42
IC3202	2
	3
	4
	5
	6
	7
	8-16
	18-21
	22
	23-24
IC3203	1-3
	6-8
	11-14
	15-16
	17-18
	21
	22
	23
IC1205	1-12
	13
	14
	16
	17
	18
	19-30


7
8
9
10
11
12
13
CS OUT
EQ
Q1204 DTC144EK SWITCH
Q1203 DTC144EK SWITCH
IC1205 TDA7317 EQ
R IN
P11
P21
P12
P22
P13
P23
P14
P24
P15
P25
R OUT
ADD
SDA2
SCL2
L IN
L OUT
9V
REF
GND
C1246 22 50V
L1203 68μH :EL0606
SURR
EQ. IN
+9V
IC3201 LA2785 DOLBY NOISE REDUCTION
BPF1
BPF2
BPF3
DC CUT
L-R
L+R
VCS
VLR
EQ. OUT
L
R

A1 [DOLBY,EQ]

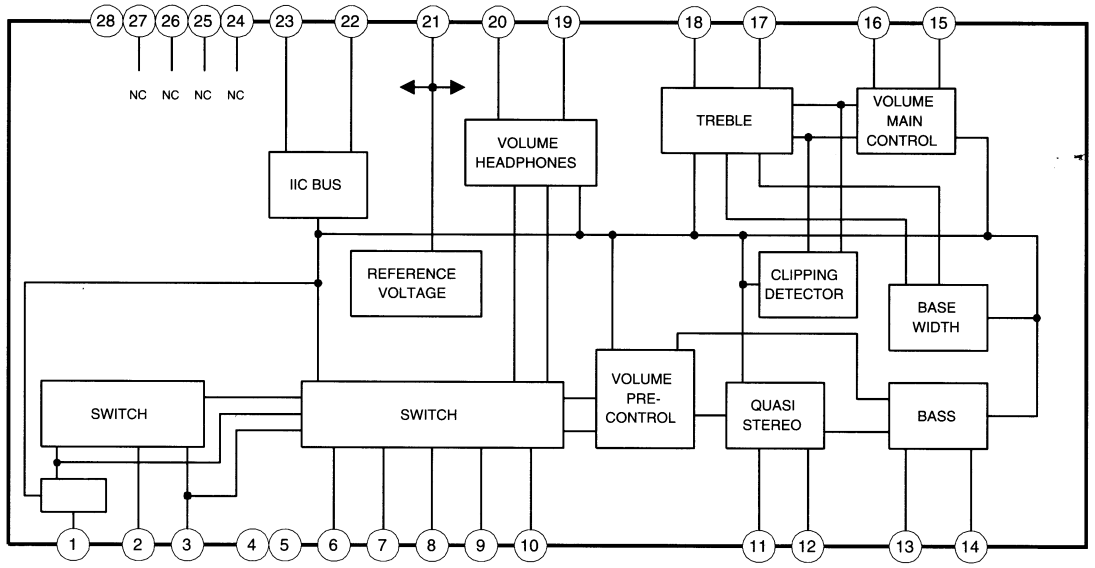
— A1 Board —


1-658-501-11 (171109411)
SONY
A1
IC1205
IC3201
IC3202
IC3203
Q1203
Q1204
CN1101
GND
REQ OUT
LEQ OUT
NC
NC
GND
REQ IN
LEQ IN
GND
ENABLE
DATA
CLOCK
GND
9V
SDA2
SCL2
SUR. OUT
12V
CENT.OUT
FB1104

Ref.No.	Pin No.	Voltage (V)
IC3201	1-10	4.4
	12-15	4.4
	16	5.1
	17	4.4
	18	5.1
	19-21	4.4
	22-24	2.3
	25	5.2
	26	4.3
	27	5.0
	28-37	4.3
	38	8.6
	40	4.8
	41	4.0
	42	5.0
IC3202	2	5.0
	3	4.0
	4	5.0
	5	3.1
	6	0.7
	7	8.6
	8-16	4.3
	18-21	4.3
	22	4.7
	23-24	2.3
IC3203	1-3	6.0
	6-8	6.0
	11-14	6.0
	15-16	5.3
	17-18	6.0
	21	12.0
	22	4.0
	23	5.0
IC1205	1-12	4.4
	13	8.8
	14	4.4
	16	4.0
	17	5.0
	18	8.8
	19-30	4.4

Pin No. Ref.No.	(B) Base	(C) Collector	(E) Emitter
Q1203	8.8	4.0	4.0
Q1204	8.8	5.0	5.0

A1 Board IC3203 TDA6622-5


28
27
26
25
24
23
22
21
20
19
18
17
16
15
NC
NC
NC
NC
IIC BUS
VOLUME HEADPHONES
TREBLE
VOLUME MAIN CONTROL
REFERENCE VOLTAGE
CLIPPING DETECTOR
BASE WIDTH
SWITCH
SWITCH
VOLUME PRE-CONTROL
QUASI STEREO
BASS
1
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3
4
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8
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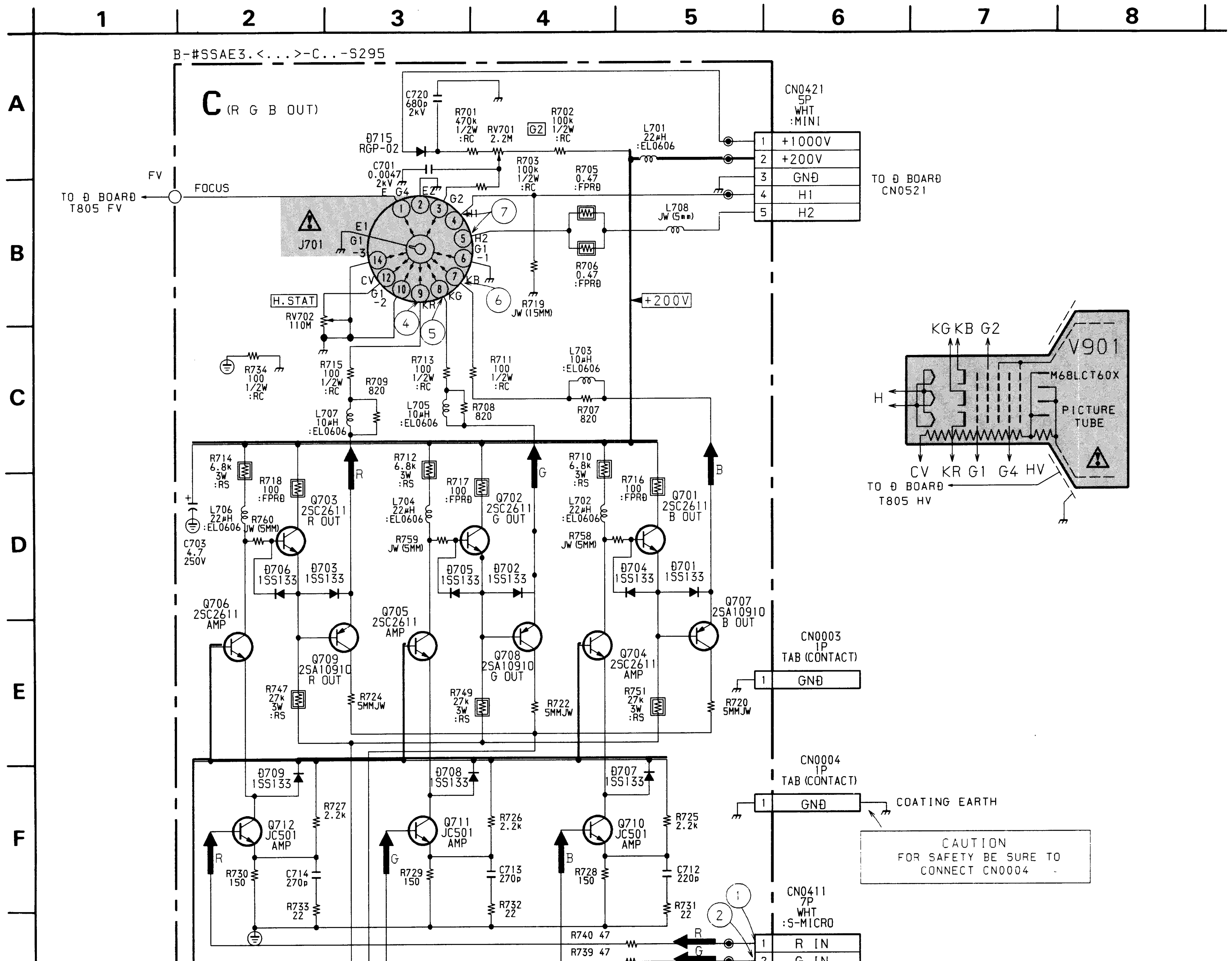
11
12
13
14


1
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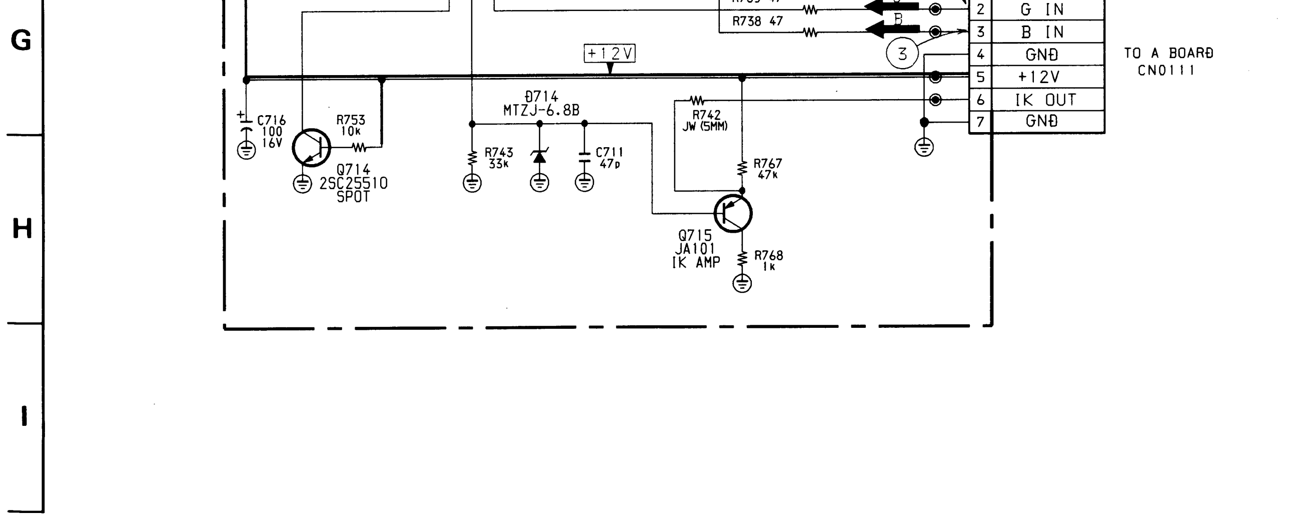
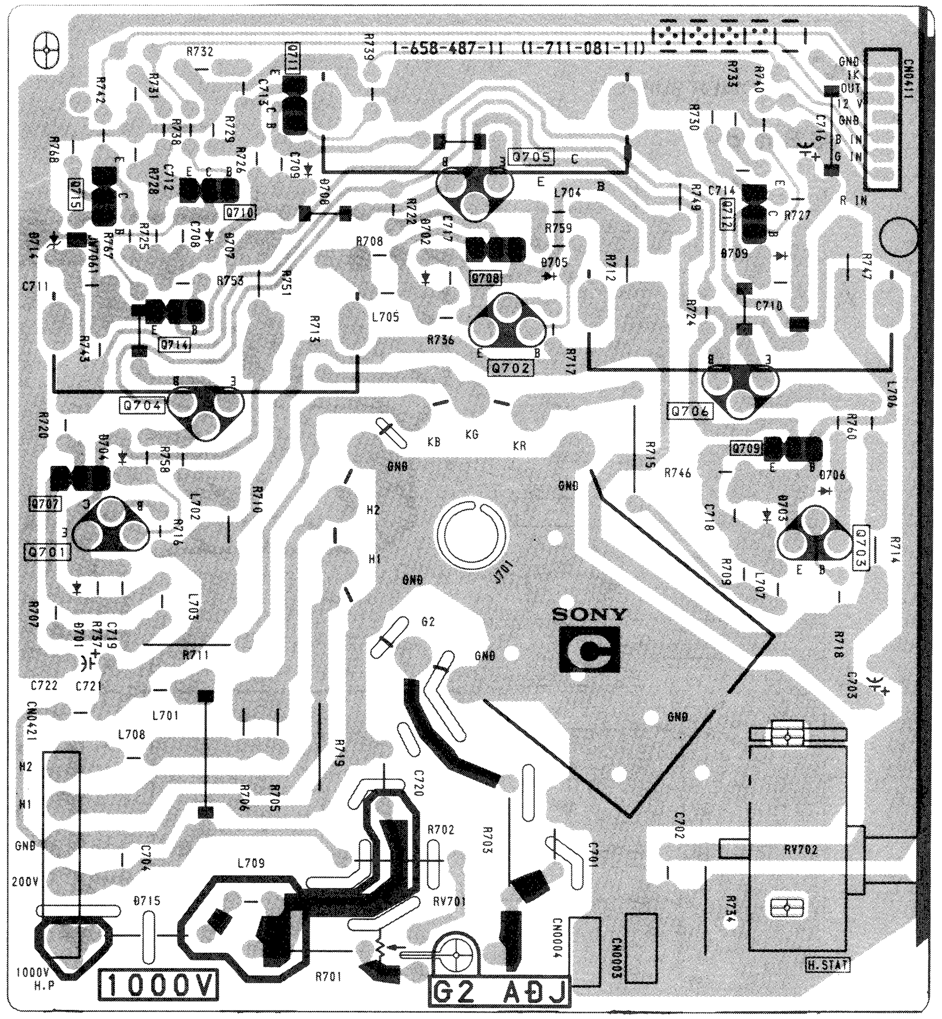
7
8
A
B
C
D
E
B-#SSAE3.<...>-C..-S295
C (R G B OUT)
FV
FOCUS
TO Ð BOARD T805 FV
J701
H.STAT
RV702 110M
C720 680p 2kV
R701 470k 1/2W :RC
RV701 2.2M
G2
R702 100k 1/2W :RC
D715 RGP-02
C701 0.0047 2kV
R703 100k 1/2W :RC
R705 0.47 :FPRÐ
R706 0.47 :FPRÐ
L701 22μH :EL0606
L708 JW (5mm)
R719 JW (15MM)
+200V
CN0421 5P WHT :MINI
+1000V
+200V
GNÐ
H1
H2
TO Ð BOARD CN0521
R734 100 1/2W :RC
R715 100 1/2W :RC
R709 820
R713 100 1/2W :RC
R711 100 1/2W :RC
L703 10μH :EL0606
L707 10μH :EL0606
L705 10μH :EL0606
R708 820
R707 820
R714 6.8k 3W :RS
R712 6.8k 3W :RS
R710 6.8k 3W :RS
R718 100 :FPRÐ
R717 100 :FPRÐ
R716 100 :FPRÐ
Q703 2SC2611 R OUT
Q702 2SC2611 G OUT
Q701 2SC2611 B OUT
L706 22μH :EL0606
L704 22μH :EL0606
L702 22μH :EL0606
R760 JW (5MM)
R759 JW (5MM)
R758 JW (5MM)
C703 4.7 250V
D706 1SS133
D703 1SS133
D705 1SS133
D702 1SS133
D704 1SS133
D701 1SS133
Q706 2SC2611 AMP
Q705 2SC2611 AMP
Q704 2SC2611 AMP
Q709 2SA1091O R OUT
Q708 2SA1091O G OUT
Q707 2SA1091O B OUT
R747 27k 3W :RS
R749 27k 3W :RS
R751 27k 3W :RS
R724 5MMJW
R722 5MMJW
R720 5MMJW
CN0003 1P TAB (CONTACT)
GNÐ
KG KB G2
V901
M68LCT60X
PICTURE TUBE
H
CV KR G1 G4 HV
TO Ð BOARD T805 HV
CN0004 1P TAB (CONTACT)
COATING EARTH
CAUTION
FOR SAFETY BE SURE TO CONNECT CN0004


F
G
H
I
D709 1SS133
D708 1SS133
D707 1SS133
Q712 JC501 AMP
Q711 JC501 AMP
Q710 JC501 AMP
R727 2.2k
R726 2.2k
R725 2.2k
R730 150
R729 150
R728 150
C714 270p
C713 270p
C712 220p
R733 22
R732 22
R731 22
CN0411 7P WHT :S-MICRO
R740 47
R739 47
R738 47
R IN
G IN
B IN
GNÐ
+12V
IK OUT
GNÐ
TO A BOARD CN0111
+12V
C716 100 16V
R753 10k
Q714 2SC2551O SPOT
D714 MTZJ-6.8B
R743 33k
C711 47p
R742 JW (5MM)
R767 47k
Q715 JA101 IK AMP
R768 1k

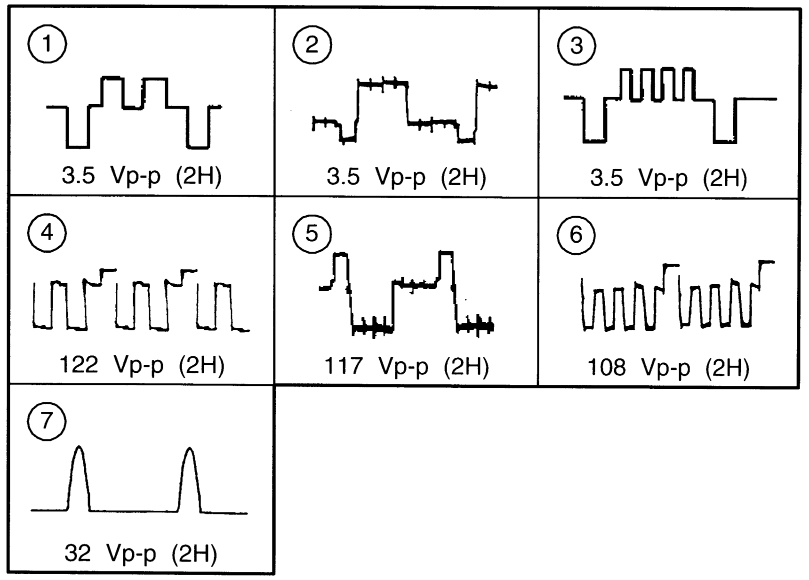
Pin No. Ref.No.	(B) Base	(C) Collector	(E) Emitter
Q701	155	204	159
Q702	146	204	151
Q703	156	203	156
Q704	12.0	155	11.5
Q705	12.0	144	11.5
Q706	12.0	151	11.5
Q707	158	5.5	176
Q708	151	5.3	173
Q709	156	5.5	168
Q710	2.1	11.4	1.7
Q711	2.2	11.4	1.8
Q712	2.1	11.4	1.7
Q714	0.7	0.1	0
Q715	5.5	0.1	3.2

C [RGB OUT]

— C Board —

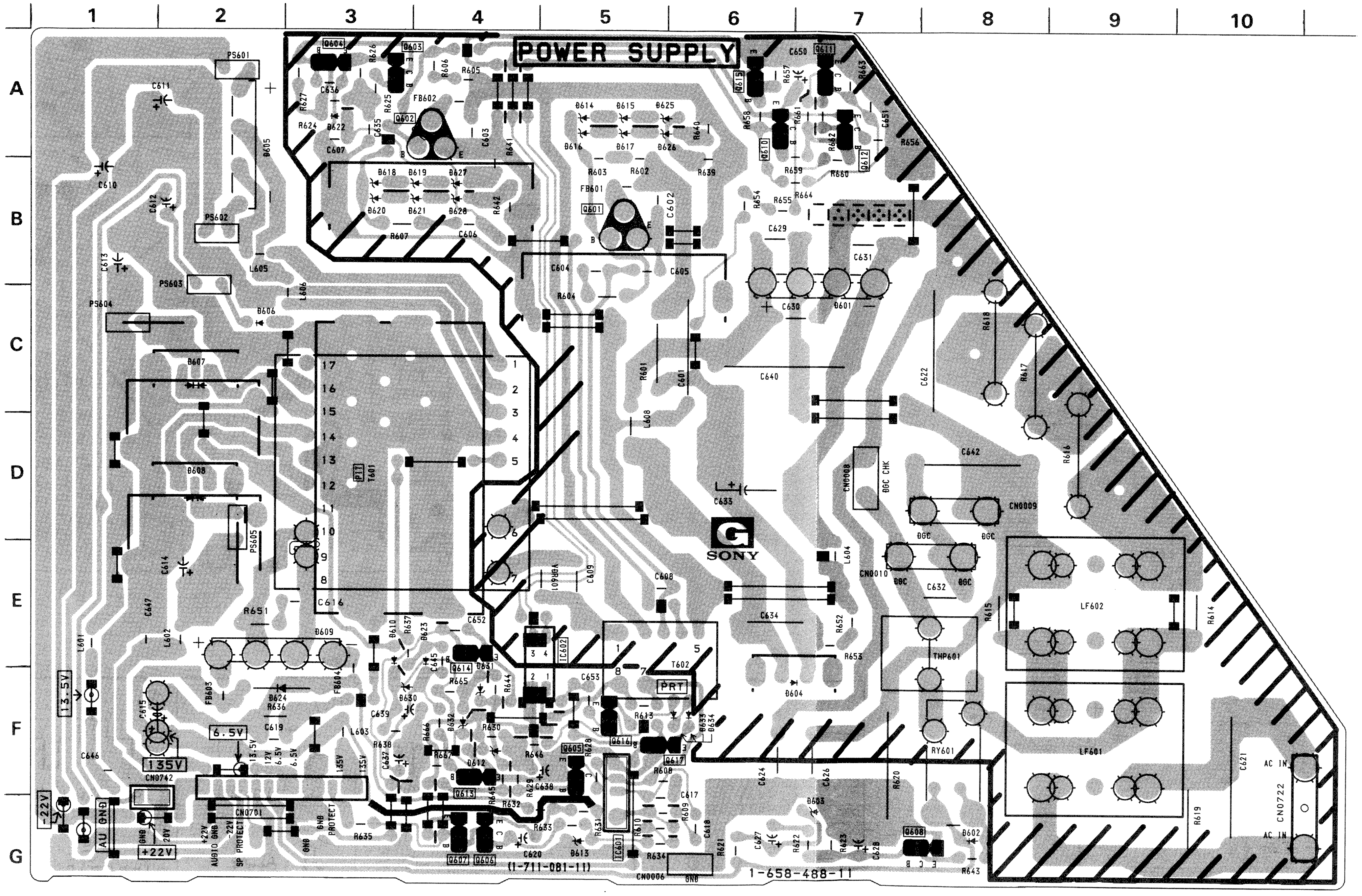

1-658-487-11 (1-711-081-11)
CN0411
GNÐ
IK OUT
12 V
GNÐ
B IN
G IN
R IN
Q705
Q702
Q704
Q706
Q707
Q701
Q703
Q708
Q709
Q710
Q711
Q712
Q714
Q715
J701
SONY
C
KB
KG
KR
H2
H1
G2
GNÐ
CN0421
200V
1000V H.P
D715
L709
RV701
RV702
CN0004
CN0003
H.STAT
1000V
G2 AÐJ

WAVEFORMS C BOARD



G [POWER SUPPLY]

— G Board —


1
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9
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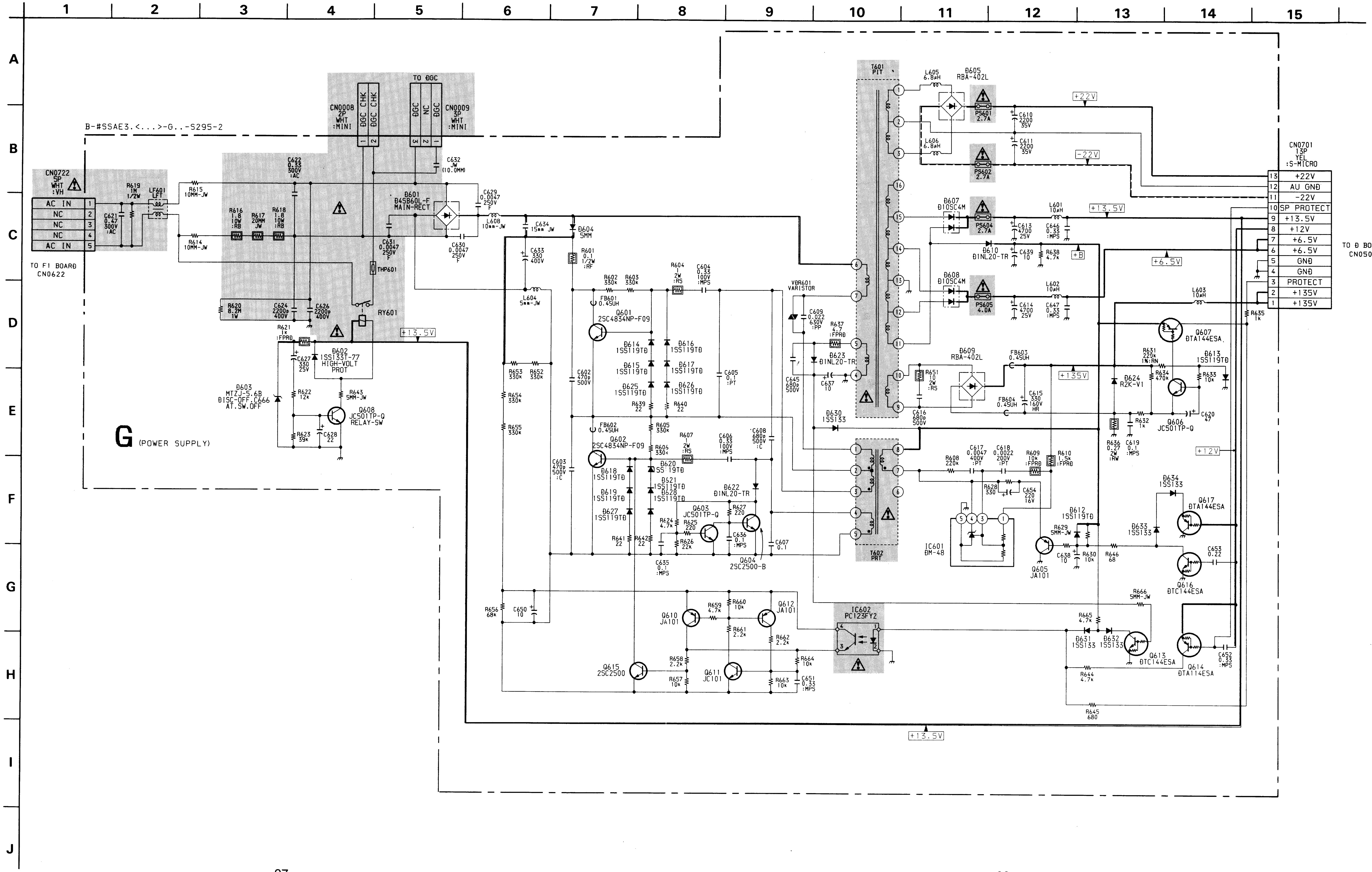
A
B
C
D
E
F
G
POWER SUPPLY
SONY
T601
T602
IC601
IC602
LF601
LF602
RY601
THP601
CN0701
CN0722
CN0742
CN0006
CN0008
CN0009
CN0010
PS601
PS602
PS603
PS604
PS605
13.5V
6.5V
135V
+22V
-22V
AU GND
AC IN
DGC
DGC CHK
PRT
SP PROTECT
AUDIO GND
1-658-488-11
(1-711-081-11)

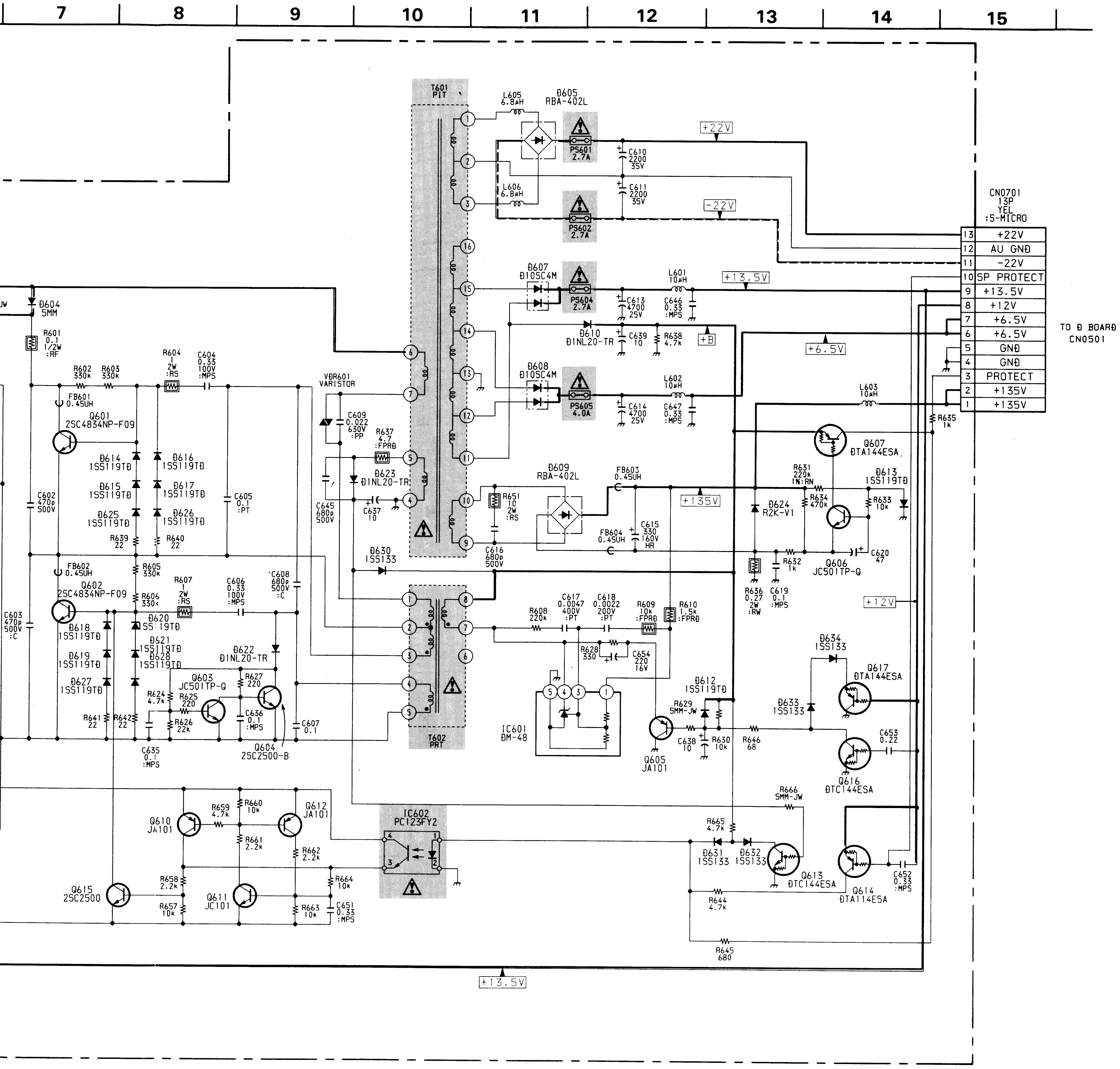
G BOARD

IC	
IC601	G-5
IC602	E-5

TRANSISTOR	
Q601	B-5
Q602	A-3
Q603	A-3
Q604	A-3
Q605	F-5
Q606	G-4
Q607	G-4
Q608	G-7
Q610	A-6
Q611	A-7
Q612	A-7
Q613	F-4
Q614	E-4
Q615	A-6
Q616	F-5
Q617	F-6

DIODE	
D601	C-7
D602	G-8
D603	F-7
D605	A-2
D607	C-2
D608	D-2
D609	E-3
D610	E-3
D612	F-4
D613	G-5
D614	A-5
D615	A-5
D616	A-5
D617	A-5
D618	B-3
D619	B-4
D620	B-3
D621	B-4
D622	A-3
D623	E-4
D624	F-2
D625	A-5
D626	A-5
D627	B-4
D628	B-4
D630	F-3
D631	E-4
D633	F-6


G (POWER SUPPLY)
B-#SSAE3.<...>-G..-S295-2
CN0722 5P WHT :VH
AC IN
NC
NC
NC
AC IN
TO F1 BOARD CN0622
R619 1M 1/2W
LF601 LFT
C621 0.47 300V :AC
R615 10MM-JW
R614 10MM-JW
R616 1.8 10W :RB
R617 20MM JW
R618 1.8 10W :RB
C622 0.33 300V :AC
CN0008 2P WHT :MINI
DGC CHK
DGC CHK
TO DGC
DGC
NC
DGC
CN0009 3P WHT :MINI
C632 JW (10.0MM)
D601 D4SB60L-F MAIN-RECT
C629 0.0047 250V F
C631 0.0047 250V F
C630 0.0047 250V F
L608 10mm-JW
THP601
RY601
R620 8.2M 1W
C624 2200p 400V
C626 2200p 400V
R621 1k :FPRD
D602 1SS133T-77 HIGH-VOLT PROT
C627 330 25V
D603 MTZJ-5.6B DISC-OFF.C666 AT.SW.OFF
R622 12k
R643 5MM-JW
Q608 JC501TP-Q RELAY-SW
R623 39k
C628 22
+13.5V
C634 15mm JW
C633 330 400V
L604 5mm-JW
D604 5MM
R601 0.1 1/2W :RF
R653 330k
R652 330k
R654 330k
R655 330k
R602 330k
R603 330k
FB601 0.45UH
Q601 2SC4834NP-F09
C602 470p 500V
D614 1SS119TD
D615 1SS119TD
D625 1SS119TD
D616 1SS119TD
D617 1SS119TD
D626 1SS119TD
R639 22
R640 22
R604 1 2W :RS
C604 0.33 100V :MPS
C605 0.1 :PT
FB602 0.45UH
Q602 2SC4834NP-F09
R605 330k
R606 330k
R607 1 2W :RS
C606 0.33 100V :MPS
C608 680p 500V :C
C603 470p 500V :C
D618 1SS119TD
D619 1SS119TD
D627 1SS119TD
D620 1SS119TD
D621 1SS119TD
D628 1SS119TD
D622 D1NL20-TR
R641 22
R642 22
R624 4.7k
Q603 JC501TP-Q
R625 220
R626 22k
R627 220
C636 0.1 :MPS
C635 0.1 :MPS
C607 0.1
Q604 2SC2500-B
R656 68k
C650 10
Q610 JA101
R659 4.7k
R660 10k
R661 2.2k
Q612 JA101
R662 2.2k
Q615 2SC2500
R658 2.2k
R657 10k
Q611 JC101
R663 10k
R664 10k
C651 0.33 :MPS
IC602 PC123FY2
VDR601 VARISTOR
C609 0.022 630V :PP
R637 4.7 :FPRD
D623 D1NL20-TR
C645 680p 500V
C637 10
D630 1SS133
T601 PIT
T602 PRT
L605 6.8uH
D605 RBA-402L
PS601 2.7A
C610 2200 35V
L606 6.8uH
C611 2200 35V
PS602 2.7A
+22V
-22V
D607 D10SC4M
PS604 2.7A
C613 4700 25V
L601 10uH
C646 0.33 :MPS
+13.5V
D610 D1NL20-TR
C639 10
R638 4.7k
+B
D608 D10SC4M
PS605 4.0A
C614 4700 25V
L602 10uH
C647 0.33 :MPS
+6.5V
L603 10uH
D609 RBA-402L
R651 10 2W :RS
FB603 0.45UH
FB604 0.45UH
C615 330 160V HR
C616 680p 500V
+135V
R608 220k
C617 0.0047 400V :PT
C618 0.0022 200V :PT
R609 10k :FPRD
R610 1.5k :FPRD
R628 330
C654 220 16V
IC601 DM-48
D612 1SS119TD
R629 5MM-JW
C638 10
R630 10k
Q605 JA101
R646 68
R631 220k 1%:RN
R634 470k
D624 R2K-V1
R632 1k
R636 0.27 2W :RW
C619 0.1 :MPS
Q606 JC501TP-Q
C620 47
Q607 DTA144ESA
D613 1SS119TD
R633 10k
R635 1k
+12V
D634 1SS133
Q617 DTA144ESA
D633 1SS133
C653 0.22
Q616 DTC144ESA
R666 5MM-JW
R665 4.7k
D631 1SS133
D632 1SS133
Q613 DTC144ESA
Q614 DTA114ESA
C652 0.33 :MPS
R644 4.7k
R645 680
CN0701 13P YEL :S-MICRO
13 +22V
12 AU GND
11 -22V
10 SP PROTECT
9 +13.5V
8 +12V
7 +6.5V
6 +6.5V
5 GND
4 GND
3 PROTECT
2 +135V
1 +135V
TO D BOARD CN0501
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H I J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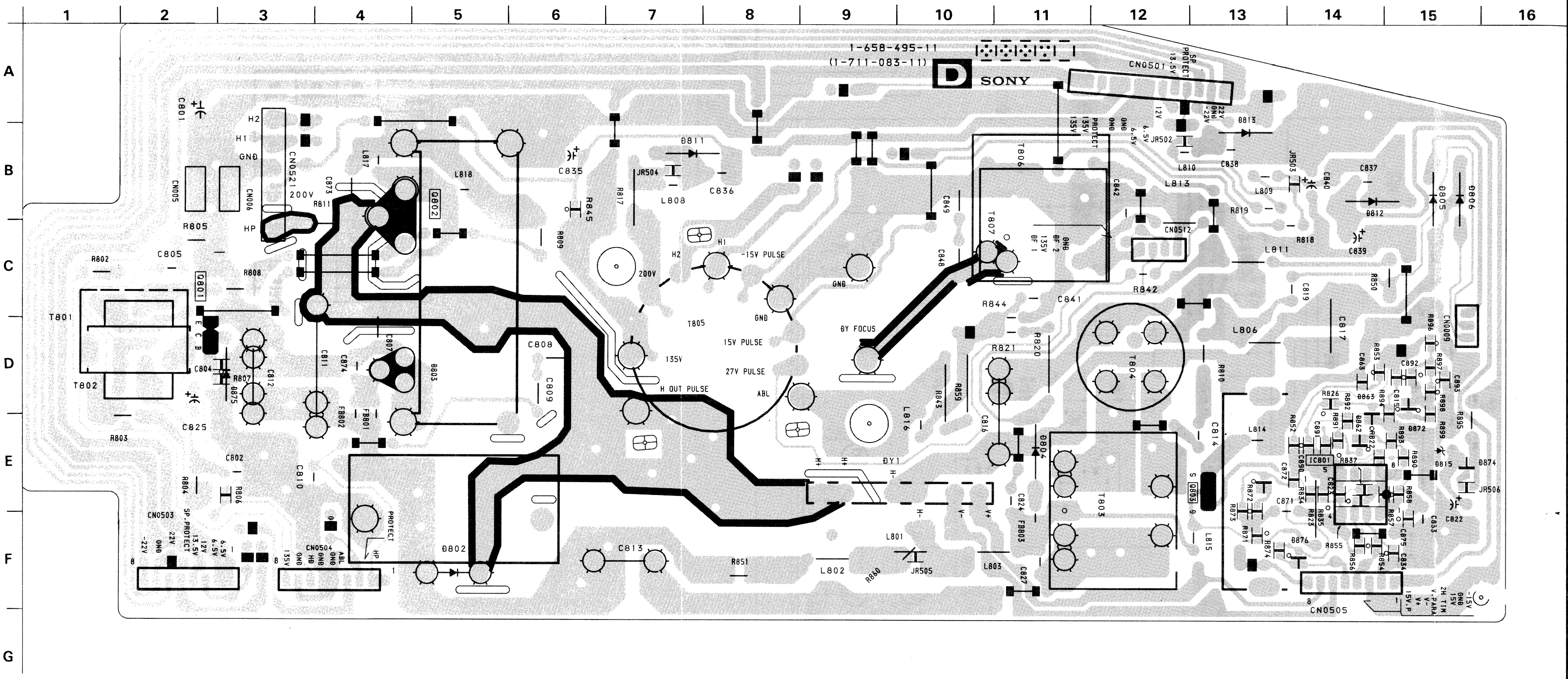
T601 PIT
L605 6.8µH
D605 RBA-402L
PS601 2.7A
C610 2200 35V
+22V
L606 6.8µH
C611 2200 35V
PS602 2.7A
-22V
CN0701 13P YEL :S-MICRO
13 +22V
12 AU GND
11 -22V
10 SP PROTECT
9 +13.5V
8 +12V
7 +6.5V
6 +6.5V
5 GND
4 GND
3 PROTECT
2 +135V
1 +135V
TO D BOARD CN0501
D607 D10SC4M
PS604 2.7A
L601 10µH
+13.5V
C613 4700 25V
C646 0.33 :MPS
D610 D1NL20-TR
C639 10
R638 4.7k
+B
+6.5V
D608 D10SC4M
PS605 4.0A
L602 10µH
C614 4700 25V
C647 0.33 :MPS
L603 10µH
R635 1k
D604 5MM
R601 0.1 1/2W :RF
R602 330k
R603 330k
R604 1 2W :RS
C604 0.33 100V :MPS
VDR601 VARISTOR
C609 0.022 630V :PP
R637 4.7 :FPRD
FB601 0.45UH
Q601 2SC4834NP-F09
D614 1SS119TD
D616 1SS119TD
D615 1SS119TD
D617 1SS119TD
D625 1SS119TD
D626 1SS119TD
R639 22
R640 22
C602 470p 500V
C605 0.1 :PT
D623 D1NL20-TR
C645 680p 500V
C637 10
D630 1SS133
D609 RBA-402L
FB603 0.45UH
R651 10 2W :RS
C616 680p 500V
FB604 0.45UH
C615 330 160V HR
+135V
Q607 DTA144ESA
R631 220k 1%:RN
D613 1SS119TD
D624 RZK-V1
R634 470k
R633 10k
R632 1k
Q606 JC501TP-Q
C620 47
R636 0.27 2W :RW
C619 0.1 :MPS
+12V
FB602 0.45UH
Q602 2SC4834NP-F09
R605 330k
R606 330k
R607 1 2W :RS
C606 0.33 100V :MPS
C608 680p 500V :C
C603 470p 500V :C
D618 1SS119TD
D620 SS119TD
D619 1SS119TD
D621 1SS119TD
D628 1SS119TD
D622 D1NL20-TR
D627 1SS119TD
Q603 JC501TP-Q
R627 220
R624 4.7k
R625 220
R626 22k
C636 0.1 :MPS
R641 22
R642 22
C635 0.1 :MPS
Q604 2SC2500-B
C607 0.1
T602 PRT
R608 220k
C617 0.0047 400V :PT
C618 0.0022 200V :PT
R609 10k :FPRD
R610 1.5k :FPRD
R628 330
C654 220 16V
IC601 DM-48
D612 1SS119TD
R629 5MM-JW
Q605 JA101
C638 10
R630 10k
R646 68
D634 1SS133
Q617 DTA144ESA
D633 1SS133
C653 0.22
Q616 DTC144ESA
R666 5MM-JW
Q610 JA101
R659 4.7k
R660 10k
Q612 JA101
R661 2.2k
R662 2.2k
IC602 PC123FY2
R665 4.7k
D631 1SS133
D632 1SS133
Q613 DTC144ESA
Q614 DTA114ESA
C652 0.33 :MPS
R644 4.7k
R645 680
Q615 2SC2500
R658 2.2k
R657 10k
Q611 JC101
R664 10k
R663 10k
C651 0.33 :MPS
+13.5V

Pin No. Ref.No.	(B) Base	(C) Collector	(E) Emitter
Q601	-1.3	84.5	-0.1
Q602	-86	-0.1	-85
Q603	-84.5	-84.8	-85
Q604	-85.0	-84.3	-85
Q605	13.3	0	10.7
Q606	0.4	13.2	0.2
Q607	13.2	0	13.2
Q608	0	13.5	-0.1
Q610	5.6	1.8	28.0
Q611	-0.8	22.6	-84.0
Q613	9.2	-0.1	0
Q614	13.2	0.4	13.2
Q615	-85.2	-85.0	-84.0
Q616	-0.1	13.3	-0.1

D [H OUT, PIN CORRECT]

— D Board —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16
A
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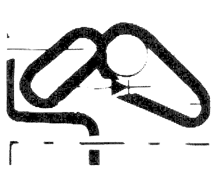
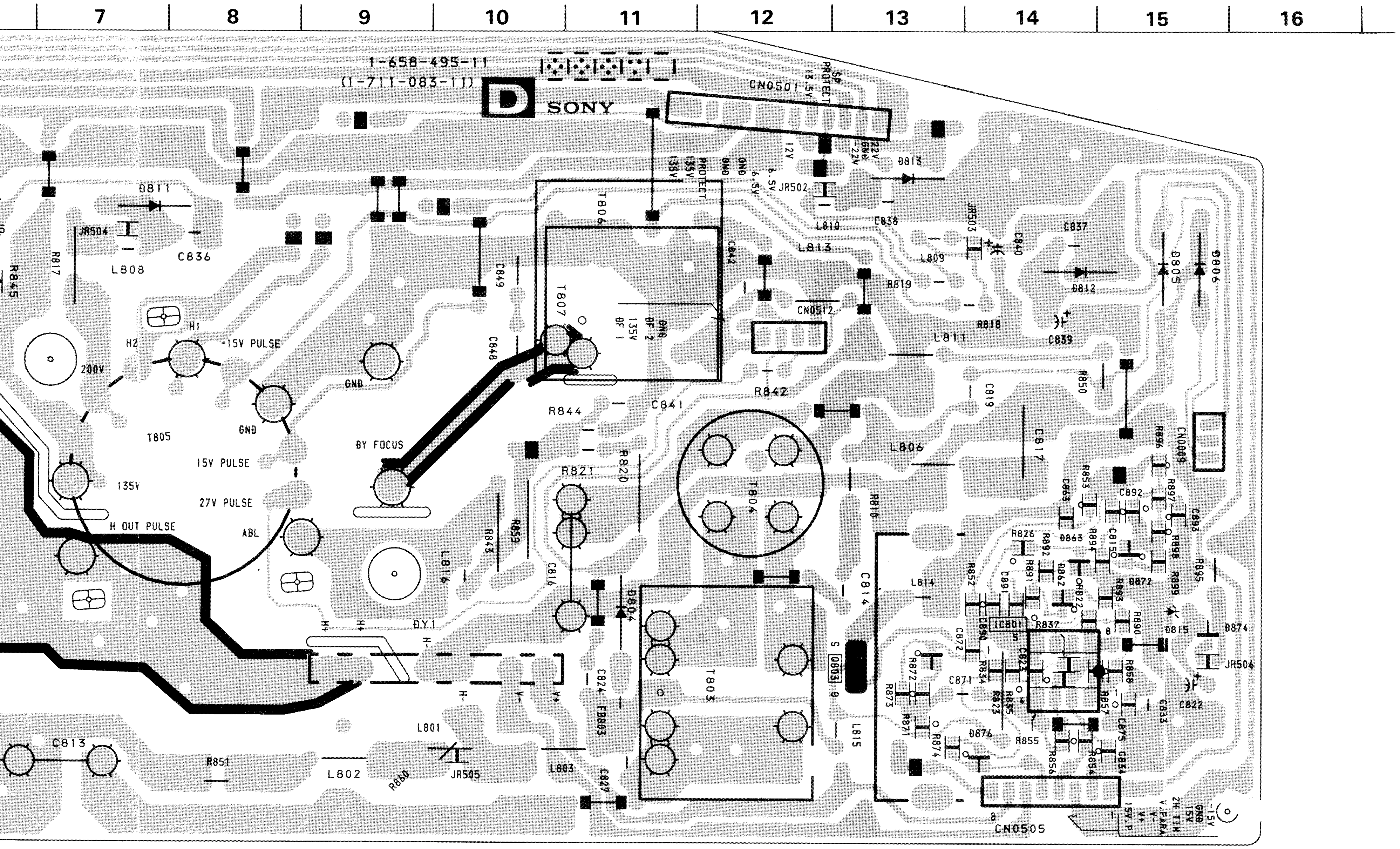
C
D
E
F
G
1-658-495-11
(1-711-083-11)
D SONY
CN0501
SP PROTECT
13.5V
12V
6.5V
GND
22V
-22V
JR502
D813
JR503
D805
D806
D812
C837
C839
C840
L809
R819
R818
L811
CN0512
R842
C841
T804
L806
CN0009
C817
C819
R850
T806
T807
GND
BF 2
135V
BF 1
PROTECT
C842
C849
C848
L810
C838
L813
H2
H1
GND
CN0521
200V
HP
CN005
CN006
R805
C801
C805
R802
R808
Q801
T801
T802
C804
R807
D875
C812
C825
R803
C802
R804
R806
CN0503
SP.PROTECT
-22V
GND
22V
13.5V
12V
6.5V
6.5V
CN0504
135V
GND
HD
GND
ABL
PROTECT
HP
D802
L817
C873
R811
Q802
C807
C811
C874
FB802
FB801
D803
C810
L818
C835
R845
R809
R817
JR504
L808
D811
C836
C808
C809
C813
R851
T805
200V
H2
H1
-15V PULSE
GND
15V PULSE
27V PULSE
135V
H OUT PULSE
ABL
BY FOCUS
DY1
H+
H-
V-
V+
L801
JR505
R860
L802
L803
C827
FB803
C824
L816
R843
R859
R844
R820
R821
C816
D804
T803
Q803
C814
L815
R810
L814
IC801
R837
CN0505
-15V
GND
15V
V.PARA
2H TIM
V+
V-
15V.P
D874
JR506
C822
D815
R895
R899
D872
C893
R898
R897
R896
C892
R853
C863
R826
D863
R855
D876
R871
R873
R874



NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.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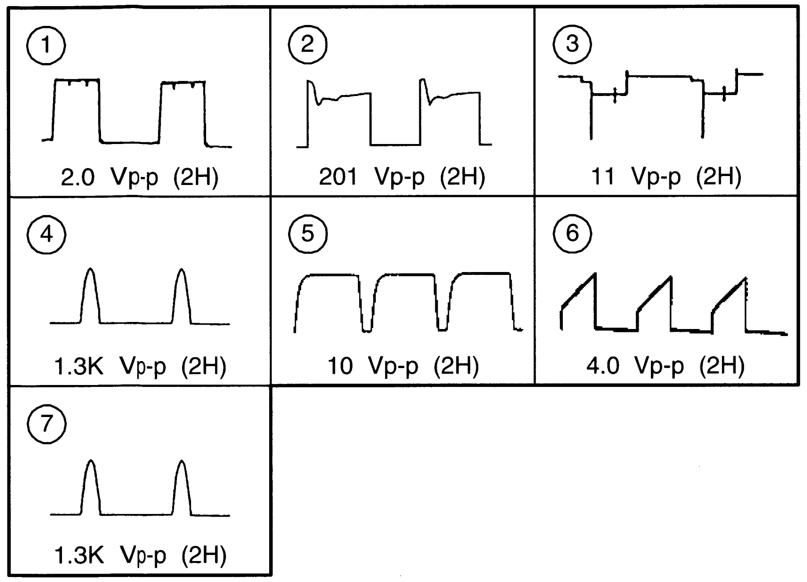
16
1-658-495-11
(1-711-083-11)
D SONY
CN0501
SP PROTECT
13.5V
12V
GND
-22V
22V
6.5V
JR502
D813
135V
135V
PROTECT
GND
GND
T806
T807
GND
DF 2
135V
DF 1
C842
L810
C838
JR503
C840
C837
L813
L809
D812
D805
D806
CN0512
R819
R818
C839
L811
R842
C841
R844
R850
C819
CN0009
R896
C817
L806
R820
R821
T804
R810
R853
C863
C892
R897
C893
R826
D863
R894
C815
R898
R895
R899
R892
R891
D862
D872
R852
C891
R822
R893
R890
L814
C814
D815
D874
IC801
R837
C890
C872
S
D803
Q803
R834
C823
R858
JR506
R872
R873
C871
R835
R825
R857
C875
C833
C822
L815
R871
R874
D876
R855
R856
R854
C834
CN0505
15V.P
V+
V.PARA
2H TIM
15V
GND
-15V
D811
JR504
C836
L808
R817
R845
C849
H1
H2
-15V PULSE
200V
GND
C848
GND
T805
135V
15V PULSE
27V PULSE
H OUT PULSE
ABL
BY FOCUS
R859
R843
L816
C816
D804
DY1
H+
H+
H-
H-
V-
V+
C824
FB803
T803
L801
JR505
R860
L802
L803
C827
C813
R851

D BOARD

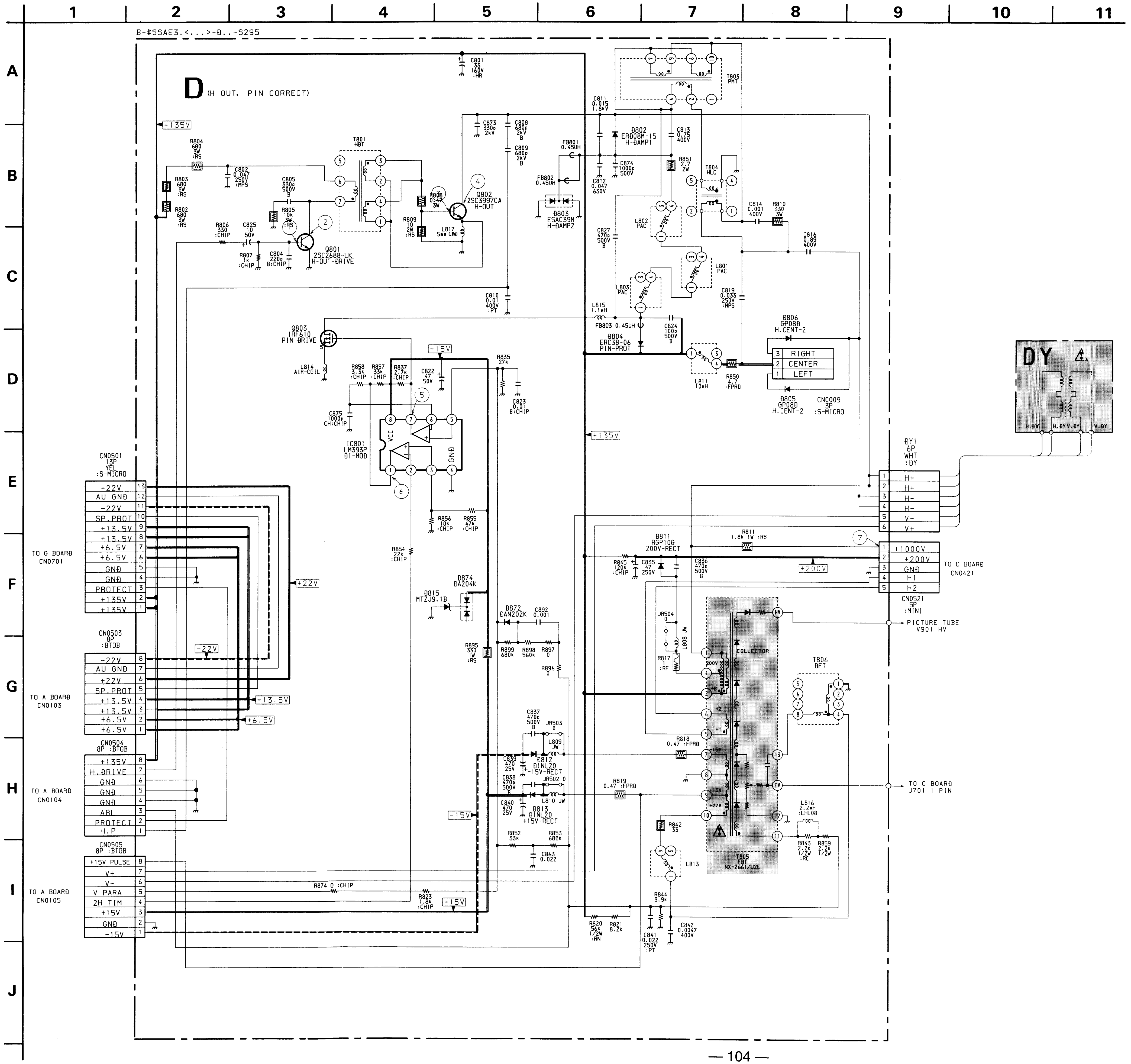
IC	
IC801	E-14
TRANSISTOR	
Q801	C-2
Q802	B-5
Q803	E-13
DIODE	
D802	F-5
D803	D-5
D804	E-11
D805	B-15
D806	B-15
D811	B-7
D812	B-14
D813	A-13
D815	E-15
D872	E-15
D874	E-15

WAVEFORMS D BOARD



Ref.No.	Pin No.	Voltage (V)
IC801	1	1.2
	2	1.8
	3	1.6
	5	2.6
	6	1.2
	7	7.5
	8	9.5

Pin No. Ref.No.	(B) Base	(C) Collector	(E) Emitter
Q801	-0.5	109	0
Q803	7.5	23.5	0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A
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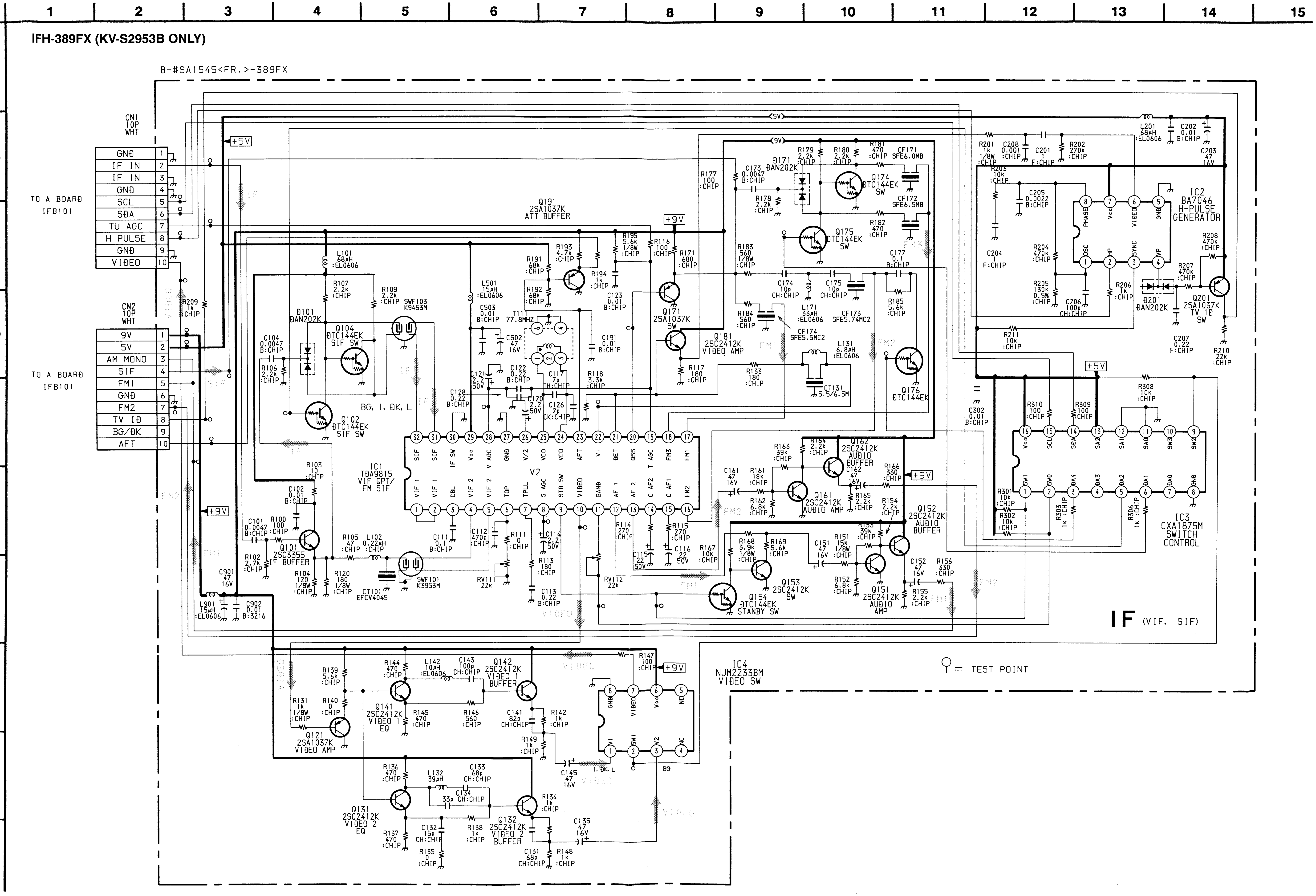
H
I
J
B-#SSAE3.<...>-D..-S295
D (H OUT. PIN CORRECT)
+135V
T801 HDT
Q801 2SC2688-LK H-OUT-DRIVE
Q802 2SC3997CA H-OUT
D802 ER0DBM-15 H-DAMP1
D803 ESAC39M H-DAMP2
T803 PMT
T804 HLC
L802 PAC
L803 PAC
L801 PAC
D804 ERC38-06 PIN-PROT
D806 GP08D H.CENT-2
D805 GP08D H.CENT-2
3 RIGHT
2 CENTER
1 LEFT
CN0009 3P :S-MICRO
Q803 IRF610 PIN DRIVE
L814 AIR-COIL
IC801 LM393P DI-MOD
+15V
DY
H.DY
H.DY V.DY
V.DY
DY1 6P WHT :DY
H+
H+
H-
H-
V-
V+
CN0501 13P YEL :S-MICRO
+22V
AU GND
-22V
SP.PROT
+13.5V
+13.5V
+6.5V
+6.5V
GND
GND
PROTECT
+135V
+135V
TO G BOARD CN0701
+22V
CN0503 8P :BTOB
-22V
TO A BOARD CN0103
+13.5V
+6.5V
CN0504 8P :BTOB
H.DRIVE
ABL
H.P
TO A BOARD CN0104
CN0505 8P :BTOB
+15V PULSE
V+
V-
V PARA
2H TIM
+15V
-15V
TO A BOARD CN0105
-15V
D811 RGP10G 200V-RECT
+1000V
+200V
H1
H2
TO C BOARD CN0421
CN0521 5P :MINI
+200V
PICTURE TUBE V901 HV
D815 MTZJ9.1B
D874 DA204K
D872 DAN202K
D812 D1NL20 -15V-RECT
D813 D1NL20 +15V-RECT
COLLECTOR
T805 FBT NX-2661/U2E
T806 DFT
TO C BOARD J701 1 PIN
L816 2.2mH :LHL08
L813
HV
FV
R874 0 :CHIP

IFH-389FX (KV-S2953B ONLY)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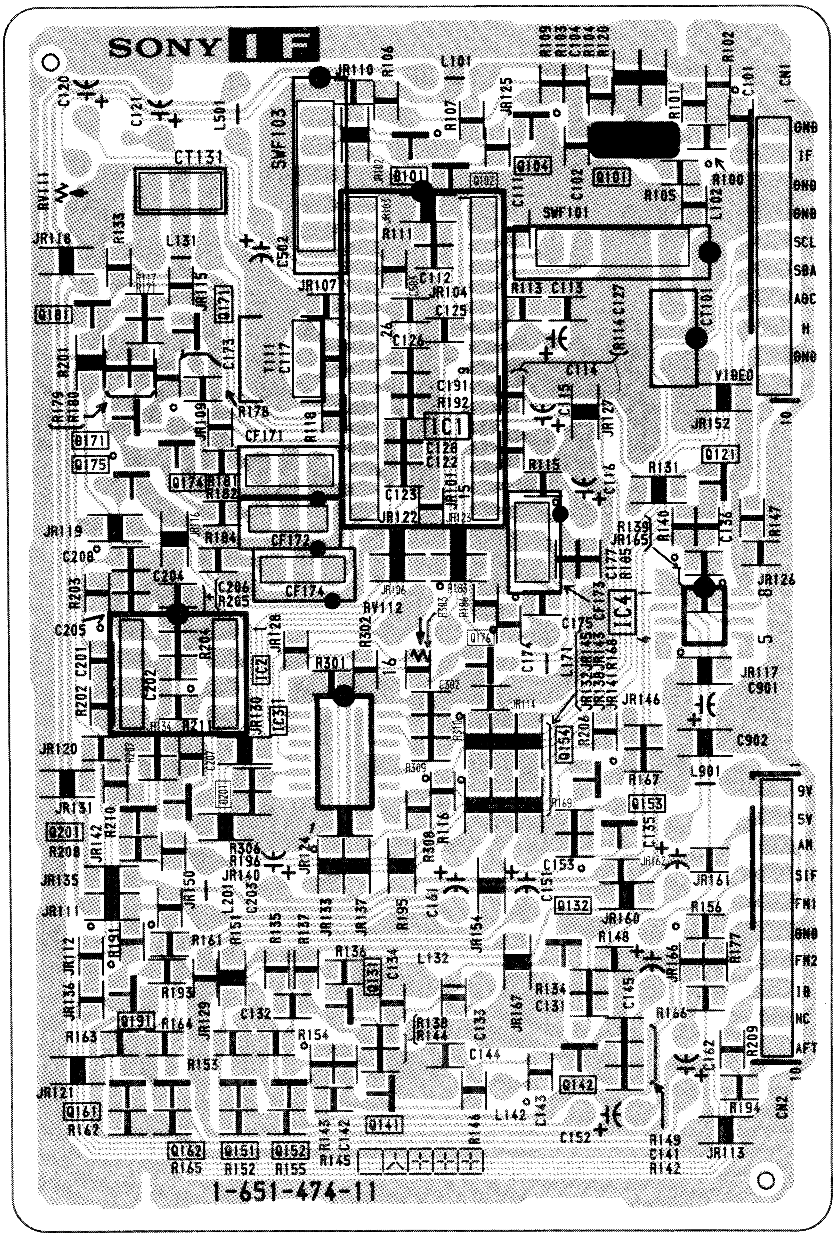
I
J
B-#SA1545<FR.>-389FX
CN1 10P WHT
GND
IF IN
IF IN
GND
SCL
SDA
TU AGC
H PULSE
GND
VIDEO
TO A BOARD IFB101
CN2 10P WHT
9V
5V
AM MONO
SIF
FM1
GND
FM2
TV ID
BG/DK
AFT
TO A BOARD IFB101
+5V
+9V
<5V>
<9V>
Q191 2SA1037K ATT BUFFER
L101 68μH :EL0606
R107 2.2k :CHIP
R109 2.2k :CHIP
SWF103 K9453M
D101 DAN202K
Q104 DTC144EK SIF SW
C104 0.0047 B:CHIP
R106 2.2k :CHIP
Q102 DTC144EK SIF SW
BG, I, DK, L
IC1 TDA9815 VIF OPT/ FM SIF
V2
SIF
SIF
IF SW
Vcc
V AGC
GND
V/2
VCO
VCO
AFT
Vi
DET
OSS
T AGC
FM3
FM1
VIF 1
VIF 1
CBL
VIF 2
VIF 2
TOP
TPLL
S AGC
STB SW
VIDEO
BAND
AF 1
AF 2
C AF2
C AF1
FM2
L501 15μH :EL0606
C503 0.01 B:CHIP
T111 77.8MHZ
C502 47 16V
C121 2.2 50V
C122 0.22 B:CHIP
C120 2.2 50V
C117 7p TH:CHIP
C126 2p CK:CHIP
C128 0.22 B:CHIP
R191 68k :CHIP
R192 68k :CHIP
R193 4.7k :CHIP
R194 1k :CHIP
R195 5.6k 1/8W :CHIP
C123 0.01 B:CHIP
C191 0.01 B:CHIP
R118 3.3k :CHIP
R116 100 :CHIP
R171 680 :CHIP
Q171 2SA1037K SW
R117 180 :CHIP
Q181 2SC2412K VIDEO AMP
R177 100 :CHIP
C173 0.0047 B:CHIP
D171 DAN202K
R179 2.2k :CHIP
R180 2.2k :CHIP
R181 470 :CHIP
CF171 SFE6.0MB
Q174 DTC144EK SW
CF172 SFE6.5MB
R178 2.2k :CHIP
R182 470 :CHIP
Q175 DTC144EK SW
R183 560 1/8W :CHIP
C174 10p CH:CHIP
C175 10p CH:CHIP
C177 0.1 B:CHIP
R184 560 :CHIP
L171 33μH :EL0606
CF173 SFE5.74MC2
CF174 SFE5.5MC2
R185 5.6k :CHIP
L131 6.8μH :EL0606
R133 180 :CHIP
CT131 5.5/6.5M
Q176 DTC144EK
FM1
FM2
FM3
IF
SIF
VIDEO
R209 1k :CHIP
R103 10 :CHIP
C102 0.01 B:CHIP
C101 0.0047 B:CHIP
R100 100 :CHIP
Q101 2SC3355 IF BUFFER
R102 2.7k :CHIP
C901 47 16V
L901 15μH :EL0606
C902 0.01 B:3216
R104 120 1/8W :CHIP
R105 47 :CHIP
L102 0.22μH :CHIP
R120 180 1/8W :CHIP
CT101 EFCV4045
SWF101 K3953M
C111 0.1 B:CHIP
C112 470p :CHIP
R111 0 :CHIP
RV111 22k
C114 2.2 50V
R113 180 :CHIP
C113 0.22 B:CHIP
RV112 22k
R114 270 :CHIP
C115 22 50V
R115 270 :CHIP
C116 22 50V
R167 10k :CHIP
C161 47 16V
R161 18k :CHIP
R163 39k :CHIP
R164 2.2k :CHIP
Q162 2SC2412K AUDIO BUFFER
C162 47 16V
R166 330 :CHIP
Q161 2SC2412K AUDIO AMP
R162 6.8k :CHIP
R165 2.2k :CHIP
R154 2.2k :CHIP
R153 39k :CHIP
Q152 2SC2412K AUDIO BUFFER
R168 3.9k 1/8W :CHIP
R169 5.6k :CHIP
Q153 2SC2412K SW
Q154 DTC144EK STANBY SW
C151 47 16V
R151 15k 1/8W :CHIP
R152 6.8k :CHIP
Q151 2SC2412K AUDIO AMP
C152 47 16V
R156 330 :CHIP
R155 2.2k :CHIP
R201 1k 1/8W :CHIP
C208 0.001 :CHIP
C201 1 F:CHIP
R202 270k :CHIP
L201 68μH :EL0606
C202 0.01 B:CHIP
C203 47 16V
R203 10k :CHIP
C205 0.0022 B:CHIP
IC2 BA7046 H-PULSE GENERATOR
PHASE
Vcc
VIDEO
GND
OSC
HP
SYNC
VP
C204 1 F:CHIP
R204 470k :CHIP
R205 130k 0.5% :CHIP
C206 100p CH:CHIP
R206 1k :CHIP
D201 DAN202K
R207 470k :CHIP
R208 470k :CHIP
Q201 2SA1037K TV ID SW
R211 10k :CHIP
C207 0.22 F:CHIP
R210 22k :CHIP
C302 0.01 B:CHIP
R310 100 :CHIP
R309 100 :CHIP
R308 10k :CHIP
Vcc
SCL
SDA
SA2
SA1
SA0
SW3
SW2
SW1
SW0
DA4
DA3
DA2
DA1
DA0
GND
R301 10k :CHIP
R302 10k :CHIP
R303 1k :CHIP
R306 1k :CHIP
IC3 CXA1875M SWITCH CONTROL
IF (VIF, SIF)
= TEST POINT
R139 5.6k :CHIP
R144 470 :CHIP
L142 10μH :EL0606
C143 100p CH:CHIP
Q142 2SC2412K VIDEO 1 BUFFER
R147 100 :CHIP
R131 1k 1/8W :CHIP
R140 0 :CHIP
Q141 2SC2412K VIDEO 1 EQ
R145 470 :CHIP
R146 560 :CHIP
C141 82p CH:CHIP
R142 1k :CHIP
R149 1k :CHIP
Q121 2SA1037K VIDEO AMP
C145 47 16V
I, DK, L
BG
IC4 NJM2233BM VIDEO SW
GND
VIDEO
Vcc
NC
V1
SW1
V2
NC
R136 470 :CHIP
L132 39μH
C133 68p CH:CHIP
C134 33p CH:CHIP
R134 1k :CHIP
Q131 2SC2412K VIDEO 2 EQ
R137 470 :CHIP
C132 15p CH:CHIP
R138 1k :CHIP
Q132 2SC2412K VIDEO 2 BUFFER
C135 47 16V
R135 0 :CHIP
C131 68p CH:CHIP
R148 1k :CHIP

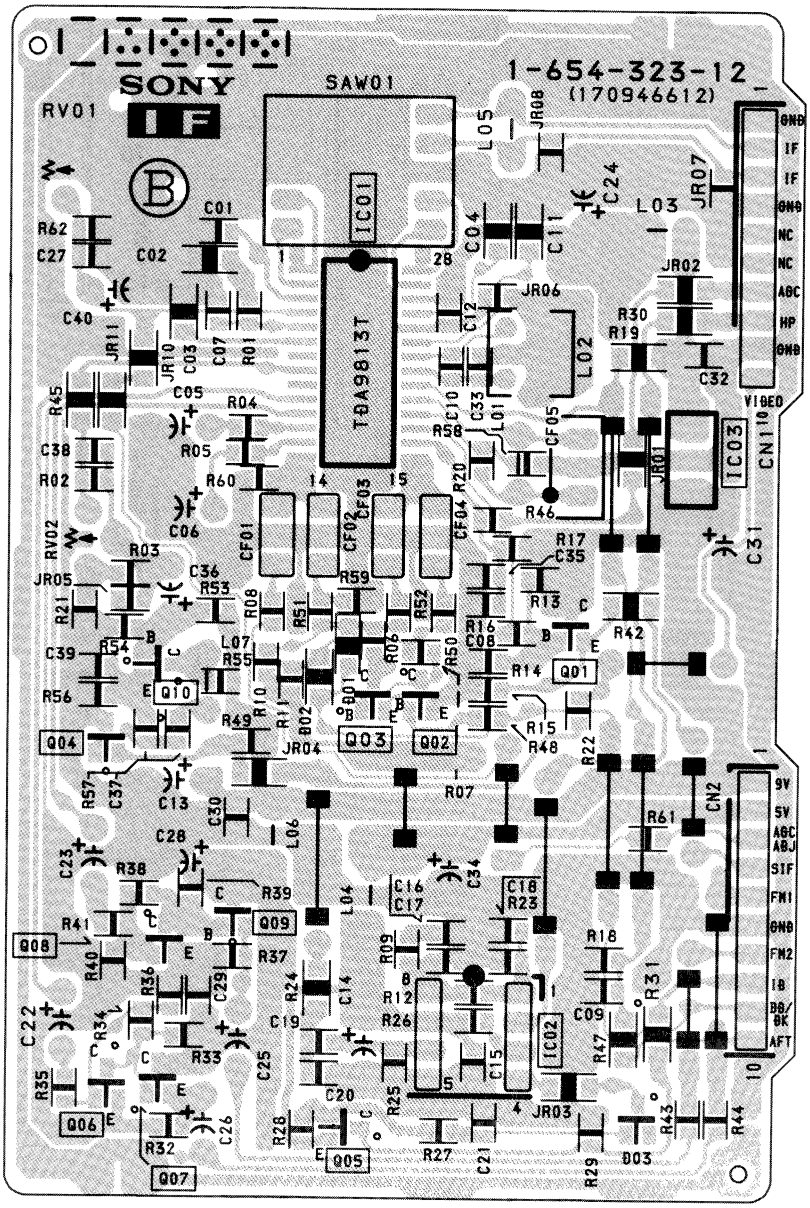
IF [VIF, SIF]

— IF Board — (KV-S2953B ONLY)

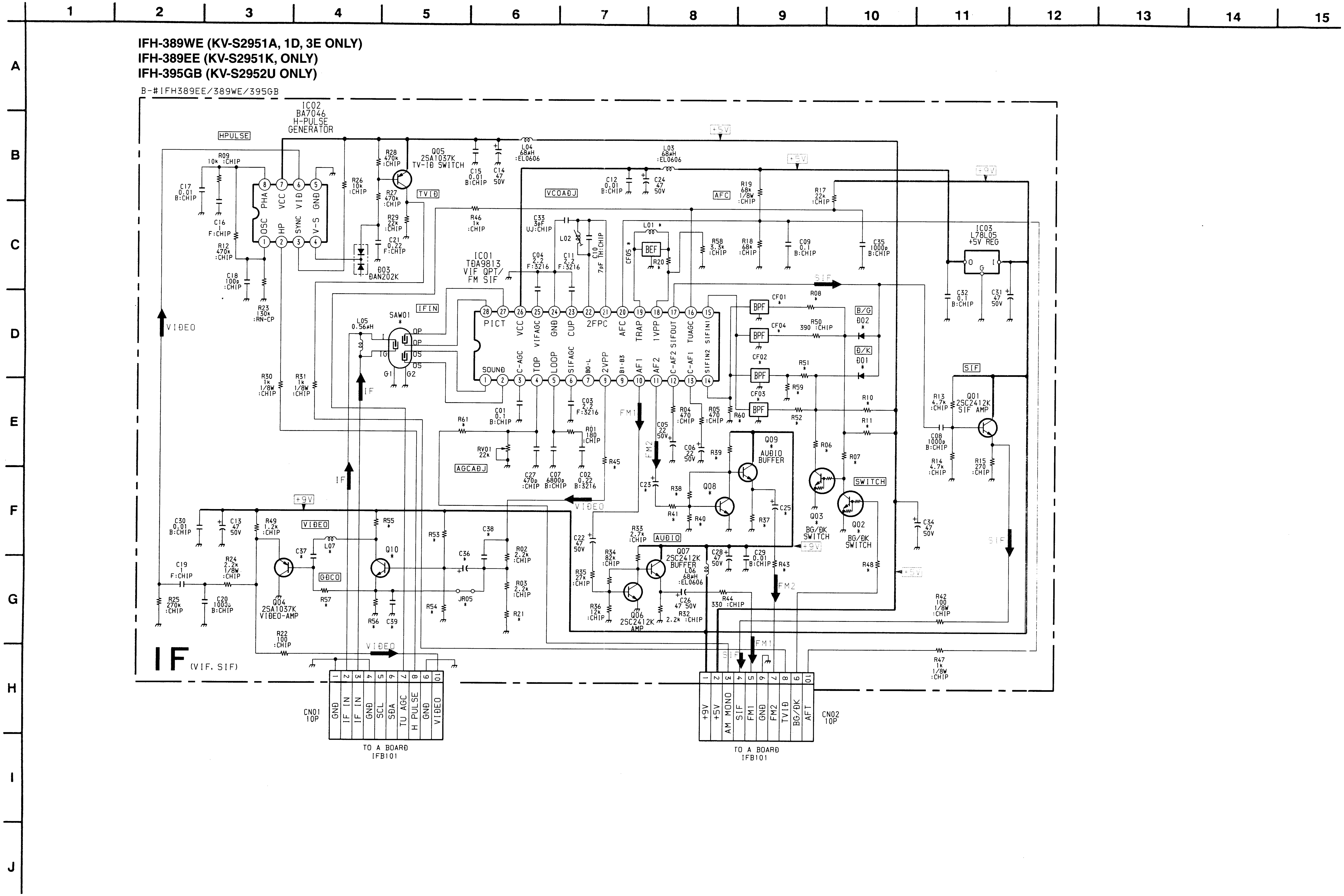

SONY IF
1-651-474-11
CN1
1
GND
IF
GND
GND
SCL
SDA
AGC
H
GND
VIDEO
10
CN2
1
9V
5V
AM
SIF
FM1
GND
FM2
IB
NC
AFT
10
IC1
IC2
IC3
IC4
SWF101
SWF103
CT101
CT131
CF171
CF172
CF173
CF174
T111
RV111
RV112
L101
L102
L131
L132
L142
L171
L201
L501
L901
Q101
Q102
Q104
Q121
Q131
Q132
Q141
Q142
Q151
Q152
Q153
Q154
Q161
Q162
Q171
Q174
Q175
Q176
Q181
Q191
Q201
D201
C101
C102
C104
C111
C112
C113
C114
C115
C116
C117
C120
C121
C122
C123
C125
C126
C127
C128
C131
C132
C133
C134
C135
C136
C141
C142
C143
C144
C145
C151
C152
C153
C161
C162
C173
C174
C175
C177
C191
C201
C202
C203
C204
C205
C206
C207
C208
C302
C502
C901
C902
R100
R101
R102
R103
R105
R106
R107
R109
R111
R113
R114
R115
R116
R117
R118
R120
R127
R131
R133
R134
R135
R136
R137
R138
R139
R140
R141
R142
R143
R144
R145
R146
R147
R148
R149
R151
R152
R153
R154
R155
R156
R161
R162
R163
R164
R165
R166
R167
R168
R169
R171
R177
R178
R179
R180
R181
R182
R183
R184
R185
R186
R191
R192
R193
R194
R195
R196
R201
R202
R203
R204
R205
R206
R208
R209
R210
R211
R301
R302
R303
R306
R308
R309
R310
JR101
JR102
JR103
JR104
JR106
JR107
JR109
JR110
JR111
JR112
JR113
JR114
JR115
JR116
JR117
JR118
JR119
JR120
JR121
JR122
JR123
JR124
JR125
JR126
JR127
JR128
JR129
JR130
JR131
JR132
JR133
JR134
JR135
JR136
JR137
JR140
JR141
JR142
JR143
JR145
JR146
JR150
JR152
JR154
JR160
JR161
JR162
JR165
JR166
JR167
1
4
5
8
9
15
16
26

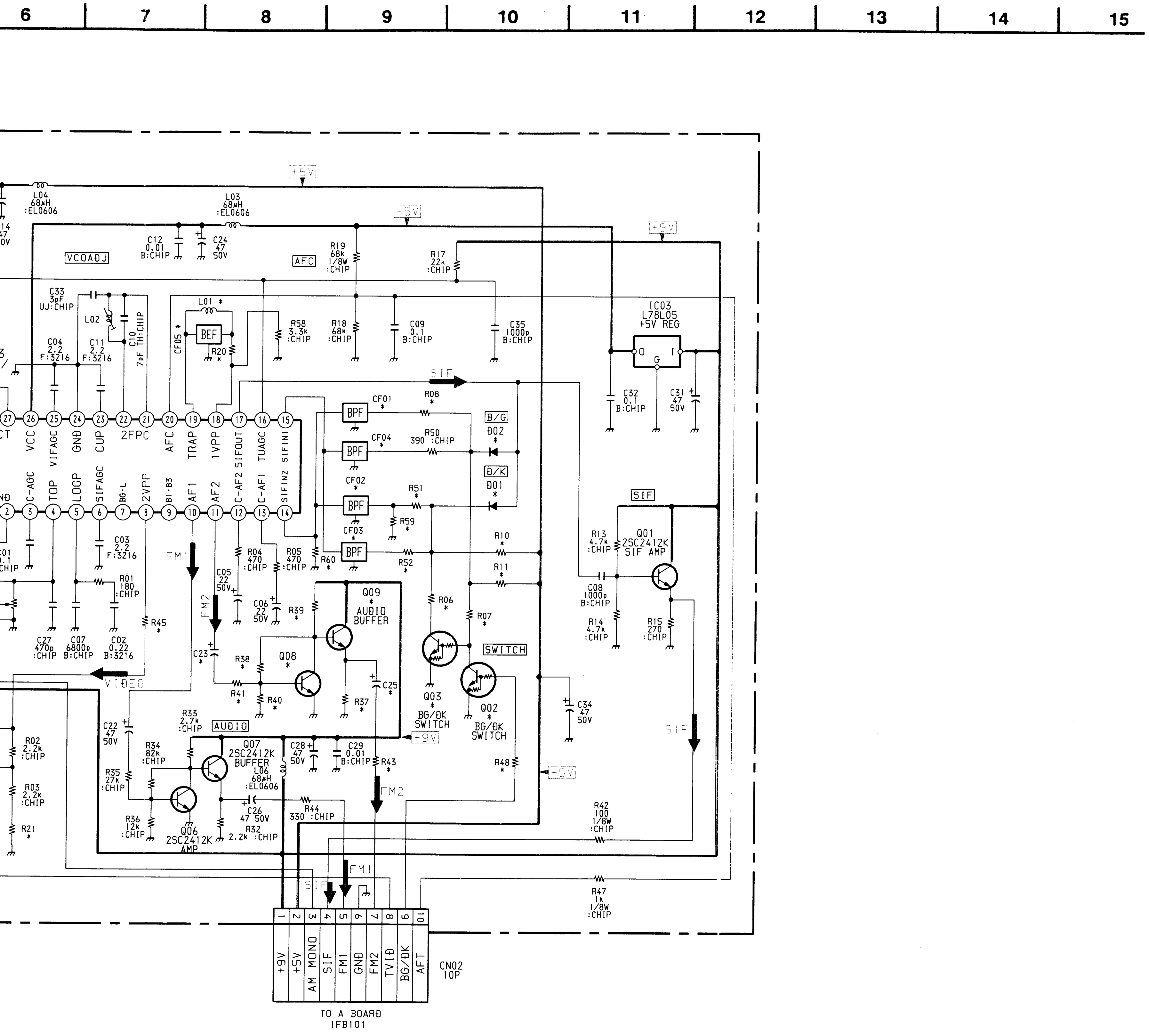
IF [VIF, SIF]

— IF Board — (KV-S2951A, 1D, 3E, 1K, 2U, ONLY)


SONY
IF
1-654-323-12
(170946612)
SAW01
IC01
TDA9813T
RV01
RV02
CN1
GND
IF
IF
GND
NC
NC
AGC
HP
GND
VIDEO
CN2
9V
5V
AGC ADJ
SIF
FM1
GND
FM2
IB
BG/BK
AFT
IC02
IC03
Q01
Q02
Q03
Q04
Q05
Q06
Q07
Q08
Q09
Q10
D01
D02
D03
CF01
CF02
CF03
CF04
CF05
L01
L02
L03
L04
L05
L06
L07
JR01
JR02
JR03
JR04
JR05
JR06
JR07
JR08
JR10
JR11

IFH-389WE (KV-S2951A, 1D, 3E ONLY)
IFH-389EE (KV-S2951K, ONLY)
IFH-395GB (KV-S2952U ONLY)


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H I J
B-#IFH389EE/389WE/395GB
IC02 BA7046 H-PULSE GENERATOR
HPULSE
PHA VCC VIĐ GNĐ
OSC HP SYNC V-S
R09 10k :CHIP
C17 0.01 B:CHIP
C16 1 F:CHIP
R12 470k :CHIP
C18 100p :CHIP
R23 130k :RN-CP
R26 10k :CHIP
R28 470k :CHIP
R27 470k :CHIP
R29 22k :CHIP
C21 0.22 F:CHIP
D03 DAN202K
Q05 2SA1037K TV-IĐ SWITCH
TVIĐ
C15 0.01 B:CHIP
C14 47 50V
L04 68μH :EL0606
+5V
L03 68μH :EL0606
C12 0.01 B:CHIP
C24 47 50V
VCOADJ
AFC
R19 68k 1/8W :CHIP
R17 22k :CHIP
+9V
R46 1k :CHIP
C33 3pF UJ:CHIP
L02
C10 7pF TH:CHIP
L01 *
BEF
CF05 *
R20 *
R58 3.3k :CHIP
R18 68k :CHIP
C09 0.1 B:CHIP
C35 1000p B:CHIP
IC03 L78L05 +5V REG
C32 0.1 B:CHIP
C31 47 50V
IC01 TDA9813 VIF QPT/ FM SIF
C04 2.2 F:3216
C11 2.2 F:3216
PICT VCC VIFAGC GNĐ CUP 2FPC AFC TRAP 1VPP SIFOUT TUAGC SIFIN1
SOUNĐ C-AGC TOP LOOP SIFAGC BO-L 2VPP B1-B3 AF1 AF2 C-AF2 C-AF1 SIFIN2
SIF
BPF
CF01 * R08 * B/G D02 *
CF04 * R50 390 :CHIP
Đ/K D01 *
CF02 * R51 *
CF03 * R59 *
SIF
R10 * R11 *
R13 4.7k :CHIP
Q01 2SC2412K SIF AMP
C08 1000p B:CHIP
R14 4.7k :CHIP
R15 270 :CHIP
L05 0.56μH
SAW01 *
IFIN
I O O5 G1 G2
VIĐEO
IF
R30 1k 1/8W :CHIP
R31 1k 1/8W :CHIP
R61 *
RV01 22k
AGCADJ
C01 0.1 B:CHIP
C27 470p :CHIP
C07 6800p B:CHIP
C03 2.2 F:3216
R01 180 :CHIP
C02 0.22 B:3216
R45 *
FM1
FM2
R04 470 :CHIP
R05 470 :CHIP
R60 *
R52 *
C05 22 50V
C06 22 50V
R39 *
Q09 * AUDIO BUFFER
R06 *
R07 *
SWITCH
Q08 *
R38 *
C23
R41 *
R40 *
R37 *
C25 *
Q03 * BG/ĐK SWITCH
Q02 * BG/ĐK SWITCH
C34 47 50V
+9V
C30 0.01 B:CHIP
C13 47 50V
R49 1.2k :CHIP
VIĐEO
R55 *
C38 *
R53 *
L07 *
C37 *
Q10
C36 *
GĐCO
R02 2.2k :CHIP
R03 2.2k :CHIP
C19 1 F:CHIP
R24 2.2k 1/8W :CHIP
R25 270k :CHIP
C20 1000p B:CHIP
Q04 2SA1037K VIĐEO-AMP
R57 *
R56 * C39 *
R54 *
JR05 *
R21 *
R22 100 :CHIP
C22 47 50V
R33 2.7k :CHIP
AUDIO
R34 82k :CHIP
R35 27k :CHIP
R36 12k :CHIP
Q06 2SC2412K AMP
Q07 2SC2412K BUFFER
L06 68μH :EL0606
C26 47 50V
R32 2.2k :CHIP
R44 330 :CHIP
C28 47 50V
C29 0.01 B:CHIP
R43 *
R48 *
R42 100 1/8W :CHIP
R47 1k 1/8W :CHIP
IF (VIF, SIF)
CN01 10P
1 GND 2 IF IN 3 IF IN 4 GNĐ 5 SCL 6 SDA 7 TU AGC 8 H PULSE 9 GNĐ 10 VIĐEO
TO A BOARD IFB101
CN02 10P
1 +9V 2 +5V 3 AM MONO 4 SIF 5 FM1 6 GNĐ 7 FM2 8 TVIĐ 9 BG/ĐK 10 AFT
TO A BOARD IFB101

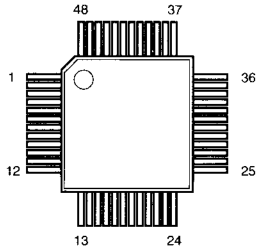

6
7
8
9
10
11
12
13
14
15
+5V
+9V
L04 68μH :EL0606
L03 68μH :EL0606
VCOADJ
AFC
C12 0.01 B:CHIP
C24 47 50V
R19 68k 1/8W :CHIP
R17 22k :CHIP
C33 3pF UJ:CHIP
L02
C04 2.2 F:3216
C11 2.2 F:3216
C10 7pF TH:CHIP
L01
BEF
CF05
R20
R58 3.3k :CHIP
R18 68k :CHIP
C09 0.1 B:CHIP
C35 1000p B:CHIP
IC03 L78L05 +5V REG
C32 0.1 B:CHIP
C31 47 50V
SIF
CF01
R08
BPF
CF04
R50 390 :CHIP
CF02
R51
CF03
R59
B/G
D02
D/K
D01
VCC
VIFAGC
GND
CUP
2FPC
AFC
TRAP
1VPP
SIFOUT
TUAGC
SIFIN1
C-AGC
TOP
LOOP
SIFAGC
BG-L
2VPP
BI-B3
AF1
AF2
C-AF2
C-AF1
SIFIN2
C03 2.2 F:3216
R01 180 :CHIP
FM1
FM2
C05 22 50V
R04 470 :CHIP
R05 470 :CHIP
R60
R52
R10
R11
R13 4.7k :CHIP
Q01 2SC2412K SIF AMP
C08 1000p B:CHIP
R14 4.7k :CHIP
R15 270 :CHIP
C06 22 50V
R39
Q09 AUDIO BUFFER
R06
R07
SWITCH
R45
C27 470p :CHIP
C07 6800p B:CHIP
C02 0.22 B:3216
C23
R38
Q08
R41
R40
R37
C25
VIDEO
Q03 BG/DK SWITCH
Q02 BG/DK SWITCH
C34 47 50V
C22 47 50V
R33 2.7k :CHIP
AUDIO
R34 82k :CHIP
R35 27k :CHIP
R36 12k :CHIP
Q07 2SC2412K BUFFER
L06 68μH :EL0606
C28 47 50V
C29 0.01 B:CHIP
R43
R48
Q06 2SC2412K AMP
C26 47 50V
R44 330 :CHIP
R32 2.2k :CHIP
R42 100 1/8W :CHIP
R47 1k 1/8W :CHIP
R02 2.2k :CHIP
R03 2.2k :CHIP
R21
+9V
+5V
AM MONO
SIF
FM1
GND
FM2
TVID
BG/DK
AFT
CN02 10P
TO A BOARD IFB101

IF BOARD * MARK

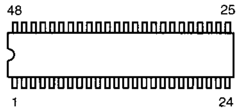
Ref. No.	S2951A	S2951D	S2953E	S2951K	S2952U
C23	47MF 50V	47MF 50V	47MF 50V	47MF 50V	–
C25	47MF 50V	47MF 50V	47MF 50V	47MF 50V	–
C36	–	–	–	220MF 6.3V	–
C37	–	–	–	82PF	–
C38	27PF	27PF	27PF	33PF	47PF
C39	–	–	–	15PF	–
CF01	5.74MHz	5.74MHz	5.74MHz	5.74MHz	–
CF02	–	–	–	6.25MHz	–
CF03	6.5MHz	6.5MHz	6.5MHz	6.5MHz	–
CF04	5.5MHz	5.5MHz	5.5MHz	5.5MHz	6.0MHz
CF05	5.5MHz	5.5MHz	5.5MHz	5.5MHz	6.0MHz
D01	MA73-TX	MA73-TX	MA73-TX	MA73-TX	–
D02	MA73-TX	MA73-TX	MA73-TX	MA73-TX	0 : CHIP
L01	10UH	10UH	10UH	6.8UH	8.2UH
L07	–	–	–	8.2UH	–
Q02	DTC144EK	DTC144EK	DTC144EK	DTC144EK	–
Q03	DTC144EK	DTC144EK	DTC144EK	DTC144EK	–
Q08	2SC2412K	2SC2412K	2SC2412K	2SC2412K	–
Q09	2SC2412K	2SC2412K	2SC2412K	2SC2412K	–
Q10	–	–	–	2SC2412K	–
JR5	0 : CHIP	0 : CHIP	0 : CHIP	–	0 : CHIP
R06	5.6K	5.6K	5.6K	5.6K	–
R07	5.6K	5.6K	5.6K	5.6K	–
R08	390	390	390	390	–
R10	22K	22K	22K	22K	–
R11	22K	22K	22K	22K	–
R20	220	220	220	180	180
R21	1K	1K	1K	3.3K	1.8K
R37	2.2K	2.2K	2.2K	2.2K	–
R38	82K	82K	82K	82K	–
R39	2.7K	2.7K	2.7K	2.7K	–
R40	12K	12K	12K	12K	–
R41	27K	27K	27K	27K	–
R43	330	330	330	330	–
R45	1K	1K	1K	680	1K
R48	1K	1K	1K	1K	–
R51	–	–	–	390	–
R52	390	390	390	390	–
R53	–	–	–	27K	–
R54	–	–	–	12K	–
R55	–	–	–	680	–
R56	–	–	–	680	–
R57	0 : CHIP	0 : CHIP	0 : CHIP	560	0 : CHIP
R59	–	–	–	470	–
R60	–	–	–	–	5.6K
R61	100	100	100	–	100
SAW01	K3350	K3350	K3350	K3350	J3352K

5-4. SEMICONDUCTORS

CXA1839Q-T6
CXD1178Q

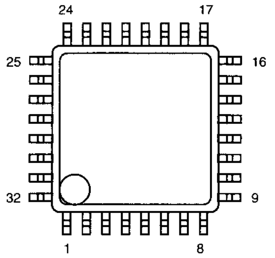

48
37
1
36
12
25
13
24

CXA1840S
CXA1855S

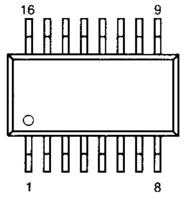


(TOP VIEW)

CXA1860Q-T4
CXD2300Q-T4

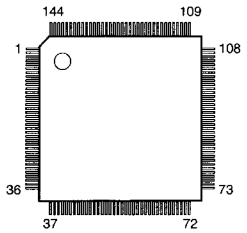

24
17
25
16
32
9
1
8

CXD1172AM
NJM2284M

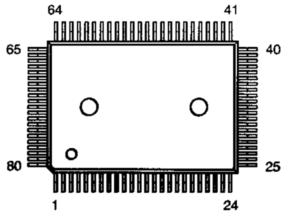


(TOP VIEW)

CXD2030R-TL
CXD2033R-TL

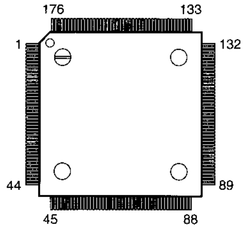

144
109
1
108
36
73
37
72

CXD2032Q-TL
CXD2036Q-TL

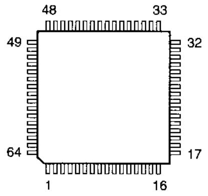

64
41
65
40
80
25
1
24

(MARKING SIDE VIEW)

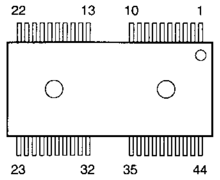
CXD2035R


176
133
1
132
44
89
45
88

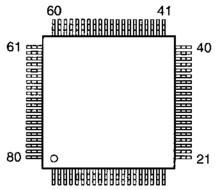
CXD2307R


48
33
49
32
64
17
1
16

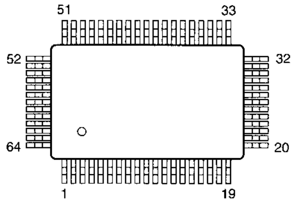
CXK1206ATM
MB81C1501PFTN-G-D-ER


22
13
10
1
23
32
35
44

CXK48324R-1

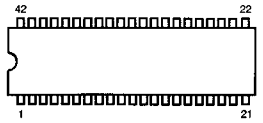

60
41
61
40
80
21
1
20

CXP85112B-622Q-TL
SAA7283GP


51
33
52
32
64
20
1
19

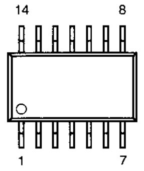
(TOP VIEW)

LA2785



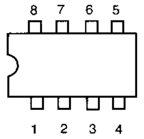
(TOP VIEW)

LA7217M
MC74HC04AF
MC74HC74AF
MC74HCU04F
SN74HC04ANS
SN74HC08ANS
SN74HC74ANS
SN74HC86ANS

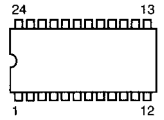


(TOP VIEW)

LM393P
M5216P
SDA9086-5
ST24C16CB1
TDA2822M
TEA2114

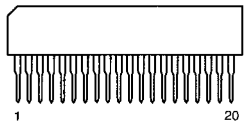


LV1011
TDA8443B

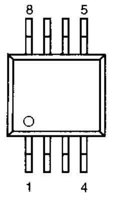


(TOP VIEW)

MB81C4256A-70PSZG

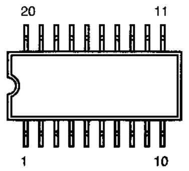


MC14577CFEL
X24164SIC7000
µPC358G2



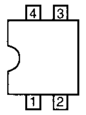
(TOP VIEW)

MC74F244M
TDA8395T



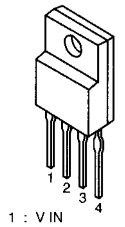
(TOP VIEW)

PC123F2
PC123FY2



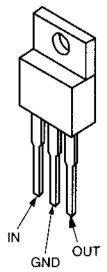
1. VCC
2. NC
3. Vout
4. GND

PQ05RF21
PQ12RF21



1 : V IN
2 : V OUT
3 : GND
4 : ON/OFF CONTROL

PQ09RE11
TEA7605



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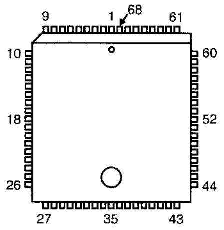
SDA5273P-C26-GEG
SDA9205-2GEG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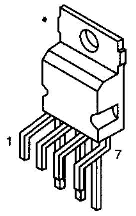
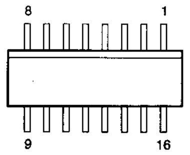
(TOP VIEW)

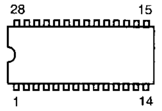
STV9379



TDA4665T-T



TDA6622-5



(TOP VIEW)

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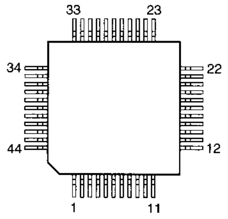
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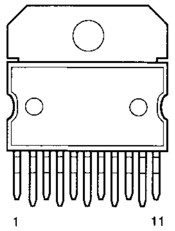
TDA7265



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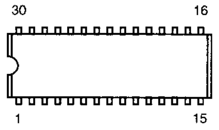
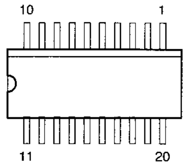
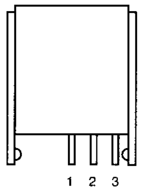


(TOP VIEW)

TDA8395T/N2

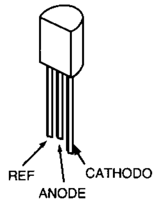


TFMY5400



1. VCC
2. VOUT
3. GND

TL431CLP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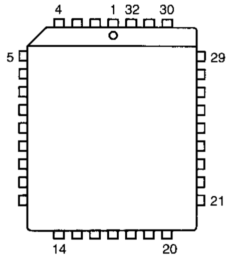
ANODE

TMS27PC020-15FML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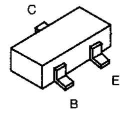
(TOP VIEW)

DTA114EK
DTC114EK
DTC124EKA-T146
DTC144EKA-T146
2SA1037K
2SA1162-G
2SC2412K
2SC2412K-QR



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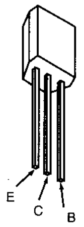
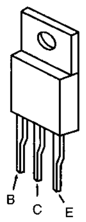


IRF610



JA101
JC501
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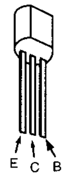
2SA1207
2SA1837
2SA733-K
2SA933S-R
2SC1740S-R
2SC2500-B
2SC2551-O



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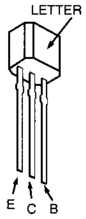
LETTER SIDE
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C
B

2SC2661
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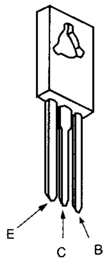

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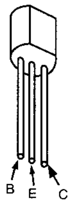

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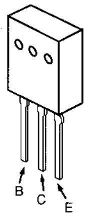

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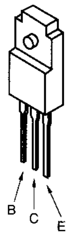

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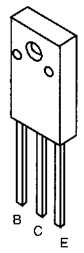

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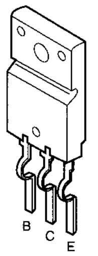
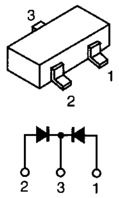


DAN202K



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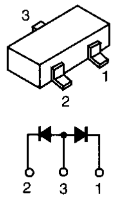
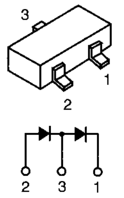


DA204K



D1NL20
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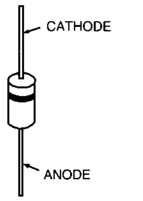
RGP10G


CATHODE
ANODE

D1N20R
MTZJ-T-77-9.1
MTZJ-T-77-9.1A
MTZJ-5.6B
MTZJ-6.8B
MTZJ-9.1B
MTZJ-15B
MTZJ-33C
MTZJ-39
RD39ESB2
RD5.6ESB2
RD6.8ESB2
RD9.1ESB2
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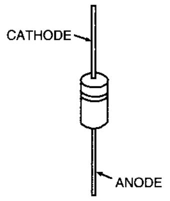
1SS133T-77


CATHODE
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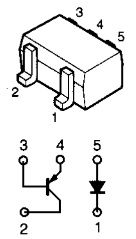
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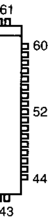
1. VCC
2. NC
3. Vout
4. GND

TROL

GEG
6-GEG
G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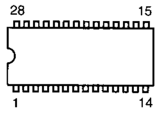
TDA6622-5



(TOP VIEW)

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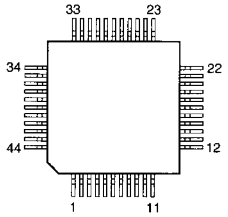
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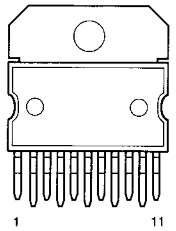
TDA7265



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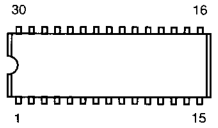
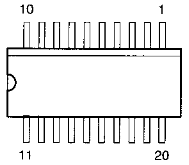


(TOP VIEW)

TDA8395T/N2



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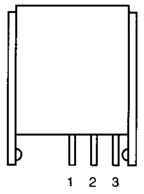
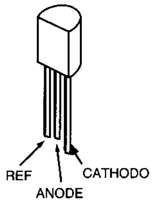


1. VCC
2. VOUT
3. GND

TL431CLP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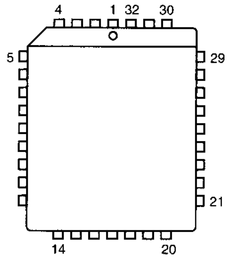
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(TOP VIEW)

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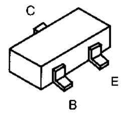
DTC114EK	2SA1162-G
DTC124EKA-T146	2SC2412K
DTC144EKA-T146	2SC2412K-QR



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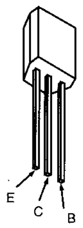

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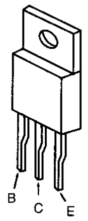

JA101	2SA733-K
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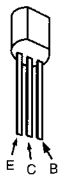
2SA1091-O	2SC1740S-R
2SA1207	2SC2500-B
2SA1837	2SC2551-O



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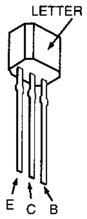
LETTER SIDE
E
C
B

2SC2661
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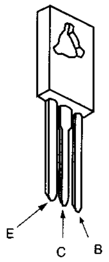

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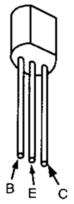

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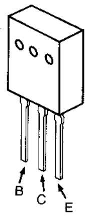

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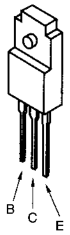

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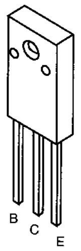

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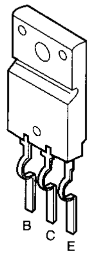

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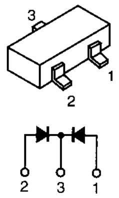

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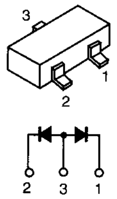

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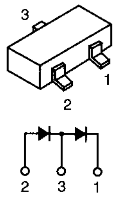

D1NL20
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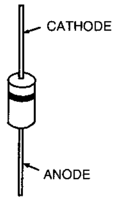
RGP02-20EL-6394
RGP10G


CATHODE
ANODE

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MTZJ-T-77-9.1A	RD5.6ESB2
MTZJ-5.6B	RD6.8ESB2
MTZJ-6.8B	RD9.1ESB2
MTZJ-9.1B	1SS119-25
MTZJ-15B	1SS133T-77
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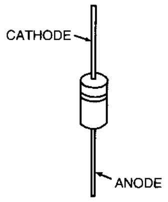
CATHODE
ANODE

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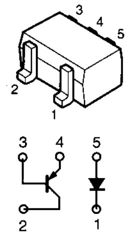
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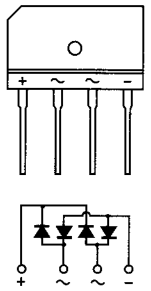
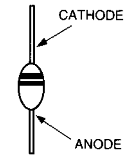


ERC38-06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ANODE

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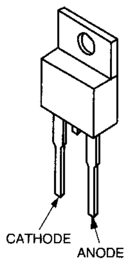
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ANODE

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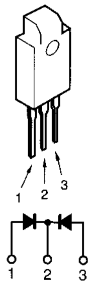
ESAD39M-06C



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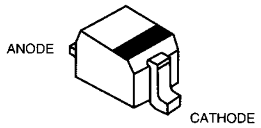
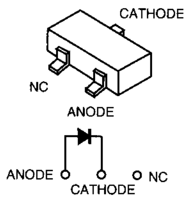
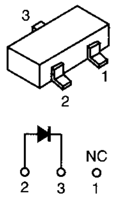

ANODE
CATHODE

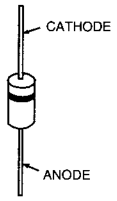
MA3030H (TX)


CATHODE
NC
ANODE
ANODE
CATHODE
NC

MA3039H
MA3051M-TX
MA3056M
MA3082M-TX
MA3091
RB411D
RD5.1M-B2
RD5.6M-B2



R2K-V1


CATHODE
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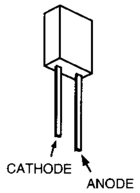
LD201VR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SECTION 6

EXPLODED VIEWS

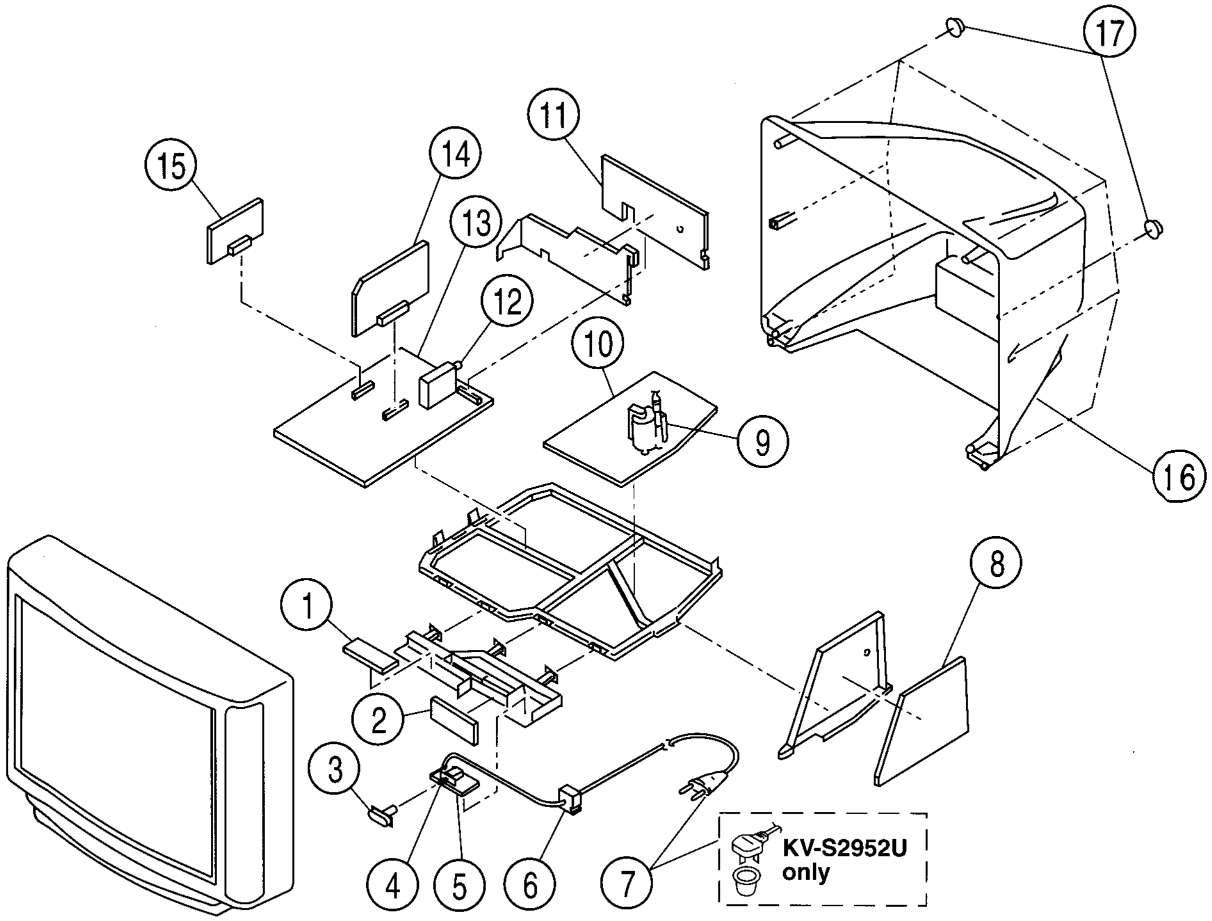
NOTE :

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

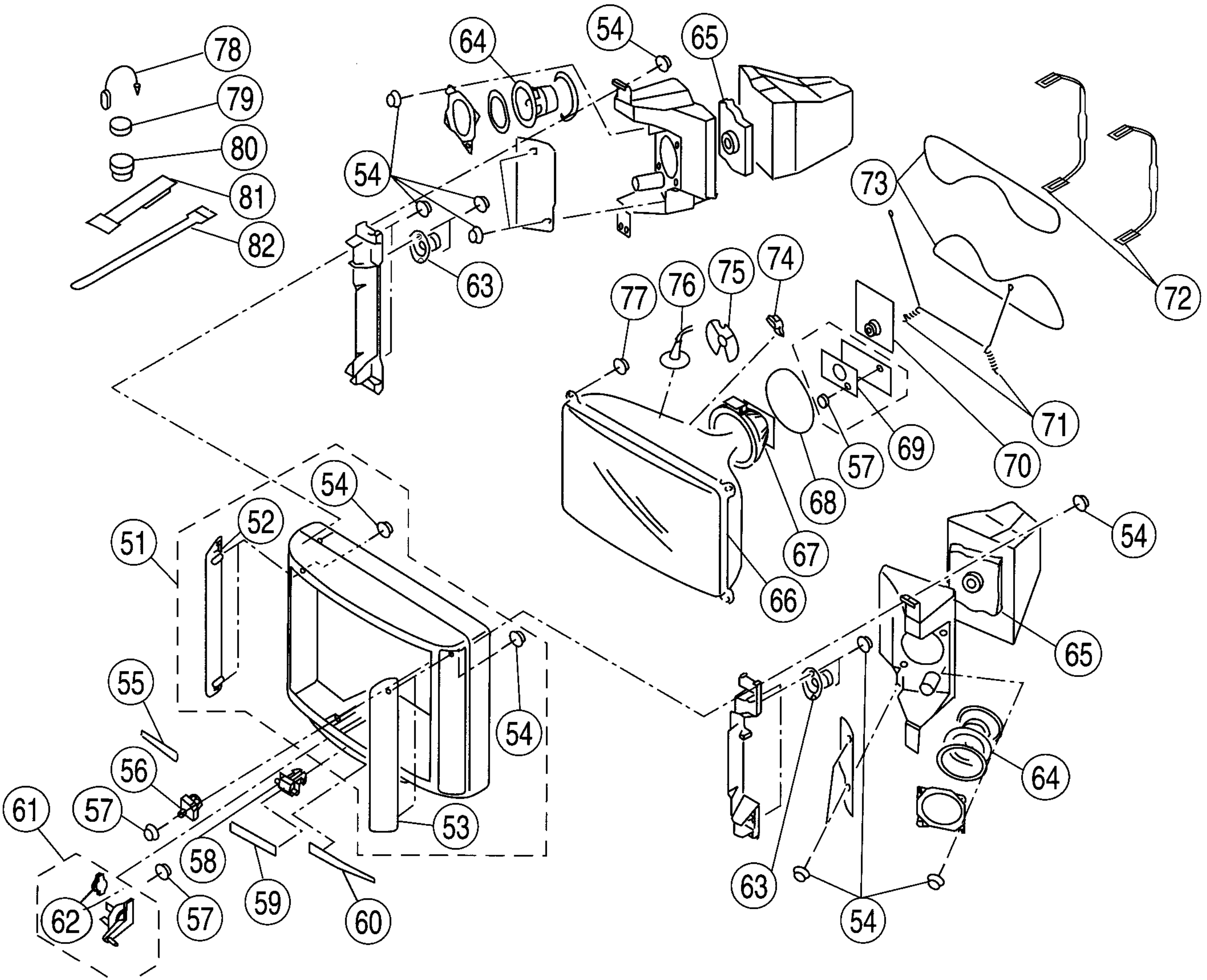
Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

6-1. CHASSIS



REF NO	PART NO	DESCRIPTION	REMARK
1	*A-1646-101-A	H1 BOARD, COMPLETE	
2	*A-1646-100-A	H2 BOARD, COMPLETE	
3	4-202-124-01	BUTTON, POWER	
4	⚠ 1-571-433-21	SWITCH, PUSH (AC POWER)	
5	*A-1624-053-A	F1 BOARD, COMPLETE	
6	4-038-615-01	HOLDER, AC CORD	
7	⚠ 1-751-680-11	CORD, POWER (WITH NOISE FILTER) 2.5A/250V	(KV-S2951A/S2953B/S2951D/S2953E/S2951K)
	⚠ 1-590-762-11	CORD, POWER (WITH PLUG) 2.5A/250V	(KV-S2952U)
8	*A-1636-010-A	G BOARD, COMPLETE	
9	⚠ 1-453-187-11	TRANSFORMER ASSY, FLYBACK	(NX-2661/U2E)
10	*A-1640-183-A	D BOARD, COMPLETE	
11	*A-1651-074-A	J BOARD, COMPLETE	
12	1-693-315-11	TUNER (UV1316)	(KV-S2951A/S2953B/S2951D/S2953E/S2951K)
	1-693-314-11	TUNER (U1344)	(KV-S2952U)
13	*A-1632-297-A	A BOARD, COMPLETE	(KV-S2951A/S2951D)
	*A-1632-347-A	A BOARD, COMPLETE	(KV-S2953B)
	*A-1632-348-A	A BOARD, COMPLETE	(KV-S2953E)
	*A-1632-349-A	A BOARD, COMPLETE	(KV-S2951K)
	*A-1632-346-A	A BOARD, COMPLETE	(KV-S2952U)
14	*A-1620-064-A	B BOARD, COMPLETE	
15	*A-1630-370-A	A1 BOARD, COMPLETE	
16	4-202-146-22	COVER, REAR	
17	4-039-358-01	SCREW (4X16), (+) BV TAPPING	

6-2. PICTURE TUBE



The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

REF NO	PART NO	DESCRIPTION	REMARK
51	X-4200-149-1	BEZNET ASSY	52 - 54
52	4-202-629-01	GRILLE (L), SPEAKER	
53	4-202-628-01	GRILLE (R), SPEAKER	
54	4-039-358-01	SCREW (4X16), (+) BV TAPPING	
55	4-202-127-81	PLATE, ORNAMENTAL	
		(KV-S2951A/S2951D/S2951K)	
	4-202-127-91	PLATE, ORNAMENTAL	
		(KV-S2953B/S2953E/S2952U)	
56	4-036-881-01	LOCK ASSY, DOOR	
57	4-039-356-11	SCREW (3X12), (+) BV TAPPING	
58	4-202-555-01	SHAFT, DOOR	
59	4-202-125-01	DOOR	
60	4-202-123-01	WINDOW, ORNAMENTAL	
61	X-4030-459-1	DAMPER, ASSY	
62	4-036-880-11	DAMPER	
63	1-504-121-21	SPEAKER (SQUAWKER) (5CM)	
64	1-504-145-11	SPEAKER (12CM)	
65	4-200-630-01	CUSHION, FOOT	

REF NO	PART NO	DESCRIPTION	REMARK
66	⚠ 8-733-856-05	PICTURE TUBE (SD-269) (M68LCT60X)	
67	⚠ 8-451-466-11	DEFLECTION YOKE (Y29GXC2B)	
68	⚠ 1-452-724-11	COIL, NA ROTATION (RT-165)	
69	*A-1644-065-A	VM BOARD, COMPLETE	
70	*A-1638-071-A	C BOARD, COMPLETE	
71	4-369-318-51	SPRING, TENSION	
72	4-202-749-01	HOLDER, DGC (29")	
73	⚠ 1-406-807-11	COIL, DEGAUSSING	
74	3-704-495-01	SPACER, DY	
75	*4-202-554-01	HOLDER, HV CABLE	
76	⚠ 1-540-006-22	CAP ASSY, HIGH-VOLTAGE	
77	4-203-043-01	SCREW (PT)	
78	4-308-870-00	CLIP, LEAD WIRE	
79	1-452-032-00	MAGNET, DISK; 10MM Ø	
80	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
81	X-4387-214-1	PERMALLOY ASSY, CORRECTION	
82	3-701-007-00	BAND, BINDING	

SECTION 7

ELECTRICAL PARTS LIST

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

When indicating parts by reference number, please include the board name.

CAPACITORS
MF : mF, PF : mmF

COILS
MMH : mH, μH : mH

B

REF.NO.	PART NO.	DESCRIPTION		REMARK
	*A-1620-064-A	B BOARD, COMPLETE ******************		
		< CAPACITOR >		
C01	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C02	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C03	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C04	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C05	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C06	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C07	1-104-664-11	ELECT 47MF	20%	25V
C08	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C09	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C10	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C11	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C12	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C14	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C15	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C16	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C17	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C18	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C19	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C20	1-163-124-00	CERAMIC CHIP 200PF	5%	50V
C21	1-163-121-00	CERAMIC CHIP 150PF	5%	50V
C22	1-104-664-11	ELECT 47MF	20%	25V
C23	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C301	1-163-111-00	CERAMIC CHIP 56PF	5%	50V
C302	1-163-031-11	CERAMIC CHIP 0.01MF		50V
C303	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C304	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C305	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C306	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C307	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C308	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C309	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C310	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C311	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C312	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C313	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C315	1-163-031-11	CERAMIC CHIP 0.01MF		50V
C316	1-163-119-00	CERAMIC CHIP 120PF	5%	50V
C317	1-163-031-11	CERAMIC CHIP 0.01MF		50V
C318	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C319	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C320	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C321	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C322	1-104-664-11	ELECT 47MF	20%	25V
C323	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C324	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C325	1-104-664-11	ELECT 47MF	20%	25V
C326	1-126-933-11	ELECT 100MF	20%	16V
C327	1-126-933-11	ELECT 100MF	20%	16V
C328	1-126-933-11	ELECT 100MF	20%	16V
C329	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C330	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C331	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C332	1-163-137-00	CERAMIC CHIP 680PF	5%	50V
C333	1-163-137-00	CERAMIC CHIP 680PF	5%	50V
C334	1-163-129-00	CERAMIC CHIP 330PF	5%	50V
C335	1-163-099-00	CERAMIC CHIP 18PF	5%	50V
C336	1-163-096-00	CERAMIC CHIP 13PF	5%	50V
C337	1-163-031-11	CERAMIC CHIP 0.01MF		50V
C338	1-104-664-11	ELECT 47MF	20%	25V
C339	1-126-964-11	ELECT 10MF	20%	50V
C340	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C341	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C342	1-126-964-11	ELECT 10MF	20%	50V
C343	1-126-964-11	ELECT 10MF	20%	50V
C344	1-163-251-11	CERAMIC CHIP 100PF	5%	50V
C501	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C502	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C503	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C504	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C505	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C506	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C507	1-104-664-11	ELECT 47MF	20%	25V
C508	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C509	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C510	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C511	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C513	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C514	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C515	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C516	1-162-568-11	CERAMIC CHIP 0.33MF	10%	16V
C517	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C518	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C519	1-124-902-00	ELECT 0.47MF	20%	50V
C520	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C522	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C525	1-163-038-91	CERAMIC CHIP 0.1MF		25V

B

REF.NO.	PART NO.	DESCRIPTION			REMARK
C527	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C528	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C530	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C531	1-104-664-11	ELECT	47MF	20%	25V
C532	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C533	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C534	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C536	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C537	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C538	1-104-664-11	ELECT	47MF	20%	25V
C539	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C540	1-104-664-11	ELECT	47MF	20%	25V
C541	1-104-664-11	ELECT	47MF	20%	25V
C542	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C543	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C544	1-104-664-11	ELECT	47MF	20%	25V
C545	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C546	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C547	1-126-924-11	ELECT	330MF	20%	10V
C548	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C553	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C556	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C557	1-163-111-00	CERAMIC CHIP	56PF	5%	50V
C558	1-163-111-00	CERAMIC CHIP	56PF	5%	50V
C559	1-163-111-00	CERAMIC CHIP	56PF	5%	50V
C560	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C561	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C563	1-104-664-11	ELECT	47MF	20%	25V
C571	1-126-964-11	ELECT	10MF	20%	50V
C572	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C573	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C574	1-104-664-11	ELECT	47MF	20%	25V
C575	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C576	1-124-903-11	ELECT	1MF	20%	50V
C577	1-164-343-11	CERAMIC CHIP	0.056MF	10%	25V
C578	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C579	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C1301	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1302	1-126-964-11	ELECT	10MF	20%	50V
C1303	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1304	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1306	1-126-964-11	ELECT	10MF	20%	50V
C1307	1-126-964-11	ELECT	10MF	20%	50V
C1308	1-126-964-11	ELECT	10MF	20%	50V
C1309	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C1310	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C1311	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1312	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1313	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C1314	1-126-964-11	ELECT	10MF	20%	50V
C1315	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1316	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1317	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C1318	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1319	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1320	1-164-004-91	CERAMIC CHIP	0.022MF	10%	25V
C1321	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C1322	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C1323	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C1324	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C1325	1-126-964-11	ELECT	10MF	20%	50V
C1326	1-126-964-11	ELECT	10MF	20%	50V
C1327	1-126-964-11	ELECT	10MF	20%	50V
C1328	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C1329	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C1330	1-126-964-11	ELECT	10MF	20%	50V
C1331	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1332	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1333	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1334	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C1335	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1336	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C1337	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C1338	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C1339	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C1340	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C1341	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C1342	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C1343	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C1344	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1345	1-126-964-11	ELECT	10MF	20%	50V
C1346	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1347	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1348	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1349	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C1350	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1351	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C1352	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1353	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1402	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1404	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1405	1-126-964-11	ELECT	10MF	20%	50V
C1406	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1408	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1409	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1410	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C1411	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1412	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C1413	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C1415	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C1416	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C1418	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C1420	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1421	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1422	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1424	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1425	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C1426	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1427	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1428	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1429	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1430	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1431	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1432	1-104-664-11	ELECT	47MF	20%	25V
C1443	1-104-664-11	ELECT	47MF	20%	25V
C1444	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1445	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1446	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1447	1-104-664-11	ELECT	47MF	20%	25V
C1448	1-104-664-11	ELECT	47MF	20%	25V

REF.NO.	PART NO.	DESCRIPTION	REMARK
C1449	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C1450	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C1451	1-126-964-11	ELECT 10MF 20%	50V
C1452	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C1453	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C1454	1-104-664-11	ELECT 47MF 20%	25V
C1455	1-163-117-00	CERAMIC CHIP 100PF 5%	50V
C1456	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C1457	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C1458	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C1459	1-126-964-11	ELECT 10MF 20%	50V
C1460	1-104-664-11	ELECT 47MF 20%	25V
C1461	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C1462	1-163-038-91	CERAMIC CHIP 0.1MF	25V

< CONNECTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN0302	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	

< DIODE >

REF.NO.	PART NO.	DESCRIPTION	REMARK
D01	8-719-914-44	DIODE DAP202K	
D301	8-719-031-68	DIODE HVU359TRF	
D302	8-719-031-68	DIODE HVU359TRF	
D303	8-719-404-46	DIODE MA110	
D1301	8-719-404-46	DIODE MA110	
D1302	8-719-914-43	DIODE DAN202K	
D1303	8-719-914-43	DIODE DAN202K	
D1304	8-719-914-43	DIODE DAN202K	
D1307	8-719-404-46	DIODE MA110	
D1308	8-719-404-46	DIODE MA110	
D1309	8-719-914-43	DIODE DAN202K	
D1401	8-719-031-68	DIODE HVU359TRF	
D1402	8-719-031-68	DIODE HVU359TRF	
D1403	8-719-404-46	DIODE MA110	

< ENCAPSULATED FILTER >

REF.NO.	PART NO.	DESCRIPTION	REMARK
FL01	1-233-446-11	FILTER, LOW PASS	
FL02	1-233-438-11	FILTER, LOW PASS	
FL03	1-233-438-11	FILTER, LOW PASS	
FL301	1-236-620-11	FILTER, LOW PASS	
FL302	1-236-620-11	FILTER, LOW PASS	
FL352	1-233-436-11	FILTER, LOW PASS	
FL353	1-233-435-11	FILTER, LOW PASS	
FL355	1-233-436-11	FILTER, LOW PASS	
FL1301	1-233-434-11	FILTER, LOW PASS	
FL1302	1-233-434-11	FILTER, LOW PASS	

< IC >

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC01	8-752-338-46	IC CXD1178Q	
IC02	8-752-370-87	IC CXD2035R	
IC04	8-752-359-55	IC CXK48324R	
IC05	8-752-359-55	IC CXK48324R	
IC06	8-759-362-96	IC MB81V1501PFTN-G-D-ER	
IC07	8-752-376-16	IC CXD2036Q-TL	
IC301	8-752-357-86	IC CXD2300Q-T4	
IC302	8-752-370-77	IC CXD2030R-TL	
IC501	8-759-925-76	IC SN74HC08ANS	
IC502	8-752-370-85	IC CXD2032Q-TL	
IC503	8-752-357-62	IC CXD2307R	
IC504	8-759-350-07	IC SDA9205-2GEG	
IC505	8-759-034-91	IC MC74F244M	
IC506	8-759-034-91	IC MC74F244M	
IC507	8-759-925-74	IC SN74HC04ANS	
IC571	8-759-083-11	IC LA7217M	
IC1301	8-759-368-89	IC TDA8395T/N2	
IC1302	8-752-070-58	IC CXA1860Q-T4	
IC1303	8-759-368-89	IC TDA8395T/N2	
IC1304	8-752-070-58	IC CXA1860Q-T4	
IC1305	8-759-032-11	IC MC74HC04AF	
IC1306	8-759-032-11	IC MC74HC04AF	
IC1401	8-752-370-86	IC CXD2033R-TL	
IC1402	8-759-032-23	IC MC74HC74AF	
IC1403	8-759-362-96	IC MB81C1501PFTN-G-D-ER	
IC1406	8-759-239-23	IC TC74HC86AF	

< COIL >

REF.NO.	PART NO.	DESCRIPTION	REMARK
L01	1-408-397-00	INDUCTOR 1UH	
L02	1-408-397-00	INDUCTOR 1UH	
L301	1-408-403-00	INDUCTOR 3.3UH	
L302	1-408-403-00	INDUCTOR 3.3UH	
L303	1-408-403-00	INDUCTOR 3.3UH	
L304	1-414-248-11	INDUCTOR 2.2UH	
L305	1-414-248-11	INDUCTOR 2.2UH	
L306	1-408-403-00	INDUCTOR 3.3UH	
L307	1-408-397-00	INDUCTOR 1UH	
L308	1-408-397-00	INDUCTOR 1UH	
L501	1-408-397-00	INDUCTOR 1UH	
L502	1-408-397-00	INDUCTOR 1UH	
L503	1-414-243-11	INDUCTOR 1UH	
L504	1-414-243-11	INDUCTOR 1UH	
L505	1-414-243-11	INDUCTOR 1UH	
L506	1-408-397-00	INDUCTOR 1UH	
L507	1-408-397-00	INDUCTOR 1UH	
L508	1-408-397-00	INDUCTOR 1UH	
L509	1-408-397-00	INDUCTOR 1UH	
L512	1-408-405-00	INDUCTOR 4.7UH	
L513	1-408-405-00	INDUCTOR 4.7UH	
L1301	1-414-196-11	INDUCTOR 47UH	
L1401	1-408-403-00	INDUCTOR 3.3UH	
L1402	1-414-248-11	INDUCTOR 2.2UH	
L1404	1-414-248-11	INDUCTOR 2.2UH	
L1405	1-408-403-00	INDUCTOR 3.3UH	
L1406	1-408-403-00	INDUCTOR 3.3UH	
L1408	1-408-403-00	INDUCTOR 3.3UH	
L1409	1-408-403-00	INDUCTOR 3.3UH	
L1410	1-408-403-00	INDUCTOR 3.3UH	
L1411	1-408-397-00	INDUCTOR 1UH	
L1412	1-408-401-00	INDUCTOR 2.2UH	

< TRANSISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q01	8-729-216-22	TRANSISTOR 2SA1162-G	
Q02	8-729-216-22	TRANSISTOR 2SA1162-G	
Q03	8-729-216-22	TRANSISTOR 2SA1162-G	
Q04	8-729-216-22	TRANSISTOR 2SA1162-G	
Q05	8-729-216-22	TRANSISTOR 2SA1162-G	
Q06	8-729-216-22	TRANSISTOR 2SA1162-G	
Q301	8-729-216-22	TRANSISTOR 2SA1162-G	
Q302	8-729-216-22	TRANSISTOR 2SA1162-G	
Q303	8-729-216-22	TRANSISTOR 2SA1162-G	
Q304	8-729-216-22	TRANSISTOR 2SA1162-G	
Q305	8-729-216-22	TRANSISTOR 2SA1162-G	

B

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q306	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q307	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q308	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q309	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q351	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q352	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q353	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q354	8-729-216-22	TRANSISTOR 2SA1162-G	
Q356	8-729-216-22	TRANSISTOR 2SA1162-G	
Q358	8-729-216-22	TRANSISTOR 2SA1162-G	
Q359	8-729-900-53	TRANSISTOR DTC114EK	
Q360	8-729-901-04	TRANSISTOR DTA114EK	
Q501	8-729-216-22	TRANSISTOR 2SA1162-G	
Q502	8-729-216-22	TRANSISTOR 2SA1162-G	
Q503	8-729-216-22	TRANSISTOR 2SA1162-G	
Q504	8-729-216-22	TRANSISTOR 2SA1162-G	
Q505	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q507	8-729-216-22	TRANSISTOR 2SA1162-G	
Q508	8-729-216-22	TRANSISTOR 2SA1162-G	
Q509	8-729-216-22	TRANSISTOR 2SA1162-G	
Q510	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1301	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1302	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1303	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1304	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1305	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1306	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1307	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1308	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1309	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1310	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1311	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1312	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1313	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1314	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1315	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1316	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1317	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1318	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1319	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1401	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1402	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1403	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1404	8-729-140-96	TRANSISTOR 2SD774-34	
Q1405	8-729-216-22	TRANSISTOR 2SA1162-G	

< RESISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
R01	1-216-629-11	METAL CHIP 120 0.50% 1/10W	
R02	1-216-635-11	METAL CHIP 220 0.50% 1/10W	
R03	1-216-635-11	METAL CHIP 220 0.50% 1/10W	
R04	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R05	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R06	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R07	1-216-663-11	METAL CHIP 3.3K 0.50% 1/10W	
R08	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
R09	1-216-662-11	METAL CHIP 3K 0.50% 1/10W	
R10	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R13	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R24	1-216-651-11	METAL CHIP 1K 0.50% 1/10W	
R25	1-216-651-11	METAL CHIP 1K 0.50% 1/10W	
R26	1-216-655-11	METAL CHIP 1.5K 0.50% 1/10W	
R27	1-216-047-91	METAL GLAZE 820 5% 1/10W	
R28	1-216-047-91	METAL GLAZE 820 5% 1/10W	
R29	1-216-047-91	METAL GLAZE 820 5% 1/10W	
R36	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R37	1-216-627-11	METAL CHIP 100 0.50% 1/10W	
R38	1-216-627-11	METAL CHIP 100 0.50% 1/10W	
R53	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R56	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R58	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R59	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R60	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R61	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R301	1-216-022-00	METAL GLAZE 75 5% 1/10W	
R302	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R303	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R304	1-208-767-11	METAL CHIP 240 0.50% 1/10W	
R305	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R306	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R307	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R308	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R309	1-216-664-11	METAL CHIP 3.6K 0.50% 1/10W	
R310	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	
R311	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R312	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R313	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
R314	1-216-651-11	METAL CHIP 1K 0.50% 1/10W	
R315	1-208-767-11	METAL CHIP 240 0.50% 1/10W	
R316	1-216-022-00	METAL GLAZE 75 5% 1/10W	
R317	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R318	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R319	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R320	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R321	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	
R322	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R323	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R324	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R325	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R326	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R327	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R328	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R329	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R330	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R331	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R332	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R333	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R334	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R335	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R336	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R337	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R338	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R339	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R356	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R357	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R358	1-216-645-11	METAL CHIP 560 0.50% 1/10W	
R359	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R360	1-216-645-11	METAL CHIP 560 0.50% 1/10W	
R361	1-216-645-11	METAL CHIP 560 0.50% 1/10W	
R362	1-208-800-11	METAL CHIP 5.6K 0.50% 1/10W	
R363	1-216-663-11	METAL CHIP 3.3K 0.50% 1/10W	

REF.NO.	PART NO.	DESCRIPTION	REMARK
R364	1-216-663-11	METAL CHIP 3.3K 0.50% 1/10W	
R365	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R367	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R368	1-216-660-11	METAL CHIP 2.4K 0.50% 1/10W	
R372	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R373	1-216-660-11	METAL CHIP 2.4K 0.50% 1/10W	
R374	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R375	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R376	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R377	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R378	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R501	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R502	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R505	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R506	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R507	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R508	1-216-632-11	METAL CHIP 160 0.50% 1/10W	
R509	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R510	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R511	1-216-663-11	METAL CHIP 3.3K 0.50% 1/10W	
R512	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R513	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
R516	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
R517	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R518	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R519	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R520	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R521	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R522	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R523	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R524	1-216-121-91	METAL GLAZE 1M 5% 1/10W	
R529	1-218-756-11	METAL CHIP 150K 0.50% 1/10W	
R530	1-216-047-91	METAL GLAZE 820 5% 1/10W	
R531	1-216-047-91	METAL GLAZE 820 5% 1/10W	
R532	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R535	1-216-047-91	METAL GLAZE 820 5% 1/10W	
R538	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R539	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R540	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R554	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R555	1-216-666-11	METAL CHIP 4.3K 0.50% 1/10W	
R556	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R557	1-216-603-11	METAL CHIP 10 0.50% 1/10W	
R558	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R559	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R561	1-216-663-11	METAL CHIP 3.3K 0.50% 1/10W	
R562	1-216-031-00	METAL GLAZE 180 5% 1/10W	
R563	1-216-031-00	METAL GLAZE 180 5% 1/10W	
R564	1-216-031-00	METAL GLAZE 180 5% 1/10W	
R565	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R566	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R572	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R573	1-216-101-00	METAL GLAZE 150K 5% 1/10W	
R574	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R575	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R576	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R577	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R579	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R580	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R1301	1-216-049-91	METAL GLAZE 1K 5% 1/10W	

REF.NO.	PART NO.	DESCRIPTION	REMARK
R1302	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1303	1-216-677-11	METAL CHIP 12K 0.50% 1/10W	
R1304	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R1305	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1306	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R1307	1-216-671-11	METAL CHIP 6.8K 0.50% 1/10W	
R1308	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1310	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R1311	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R1312	1-216-651-11	METAL CHIP 1K 0.50% 1/10W	
R1313	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1314	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R1315	1-208-767-11	METAL CHIP 240 0.50% 1/10W	
R1316	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1317	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1318	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1319	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W	
R1320	1-216-648-11	METAL CHIP 750 0.50% 1/10W	
R1321	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1322	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R1323	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1324	1-216-651-11	METAL CHIP 1K 0.50% 1/10W	
R1325	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R1326	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R1327	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1328	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1329	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1330	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R1331	1-216-650-11	METAL CHIP 910 0.50% 1/10W	
R1332	1-216-626-11	METAL CHIP 91 0.50% 1/10W	
R1333	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1334	1-216-667-11	METAL CHIP 4.7K 0.50% 1/10W	
R1335	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1336	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R1337	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1338	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R1339	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1340	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R1341	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R1342	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1343	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1344	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1345	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1346	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R1347	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R1348	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1349	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1350	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W	
R1351	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1352	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R1353	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R1355	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1356	1-208-771-11	METAL CHIP 360 0.5% 1/10W	
R1357	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1358	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R1359	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R1360	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1361	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1362	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R1363	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	REMARK
R1364	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R1365	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R1366	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R1367	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1368	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1369	1-216-083-00	METAL GLAZE 27K 5% 1/10W	
R1370	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1371	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1372	1-216-105-91	METAL GLAZE 220K 5% 1/10W	
R1373	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R1374	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1375	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1376	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1377	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1378	1-218-764-11	METAL CHIP 330K 0.50% 1/10W	
R1401	1-216-022-00	METAL GLAZE 75 5% 1/10W	
R1402	1-216-022-00	METAL GLAZE 75 5% 1/10W	
R1405	1-216-651-11	METAL CHIP 1K 0.50% 1/10W	
R1406	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
R1407	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1410	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R1411	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R1412	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R1413	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1414	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R1415	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1416	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R1417	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1419	1-216-105-91	METAL GLAZE 220K 5% 1/10W	
R1420	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R1421	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R1422	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1424	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R1425	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R1426	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R1427	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R1428	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1434	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R1435	1-216-651-11	METAL CHIP 1K 0.50% 1/10W	
R1436	1-216-649-11	METAL CHIP 820 0.50% 1/10W	
R1437	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1438	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1439	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1440	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1441	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1442	1-216-049-91	METAL GLAZE 1K 5% 1/10W	

< CRYSTAL >

REF.NO.	PART NO.	DESCRIPTION	REMARK
X301	1-760-457-91	VIBRATOR, CRYSTAL (17.7MHZ)	
X302	1-527-722-00	OSCILLATOR, CRYSTAL (14.3MHZ)	
X571	1-577-165-11	VIBLATOR, CERAMIC	
X1401	1-527-722-00	OSCILLATOR, CRYSTAL (14.3MHZ)	
X1402	1-760-457-91	VIBRATOR, CRYSTAL (17.7MHZ)	

*A-1624-053-A F1 BOARD, COMPLETE
****

< CONNECTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN0007	⚠ *1-580-844-11	PIN, CONNECTOR (POWER)	
CN0622	⚠ *1-695-292-11	PIN, CONNECTOR (POWER)	

< FUSE >

REF.NO.	PART NO.	DESCRIPTION	REMARK
F651	⚠ 1-576-232-21	FUSE (H.B.C.) (5A 250V)	
	1-533-230-11	HOLDER, FUSE; F651	

< SWITCH >

REF.NO.	PART NO.	DESCRIPTION	REMARK
S651	⚠ 1-571-433-21	SWITCH, PUSH (AC POWER)	

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*A-1630-370-A A1 BOARD, COMPLETE
****

< CAPACITOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
C1236	1-164-348-11	CERAMIC CHIP 0.12MF 10% 25V	
C1237	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1238	1-163-986-00	CERAMIC CHIP 0.027MF 10% 25V	
C1239	1-163-986-00	CERAMIC CHIP 0.027MF 10% 25V	
C1240	1-163-022-00	CERAMIC CHIP 0.012MF 10% 50V	
C1241	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C1242	1-163-014-00	CERAMIC CHIP 0.0027MF 5% 50V	
C1243	1-163-014-00	CERAMIC CHIP 0.0027MF 5% 50V	
C1244	1-163-010-11	CERAMIC CHIP 0.0012MF 10% 50V	
C1245	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C1246	1-126-965-11	ELECT 22MF 20% 50V	
C1247	1-126-933-11	ELECT 100MF 20% 16V	
C1248	1-164-348-11	CERAMIC CHIP 0.12MF 10% 25V	
C1249	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1250	1-163-986-00	CERAMIC CHIP 0.027MF 10% 25V	
C1251	1-163-986-00	CERAMIC CHIP 0.027MF 10% 25V	
C1252	1-163-022-00	CERAMIC CHIP 0.012MF 10% 50V	
C1253	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C1254	1-163-014-00	CERAMIC CHIP 0.0027MF 5% 50V	
C1255	1-163-014-00	CERAMIC CHIP 0.0027MF 5% 50V	
C1256	1-163-010-11	CERAMIC CHIP 0.0012MF 10% 50V	
C1257	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C1264	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C3201	1-124-925-11	ELECT 2.2MF 20% 50V	
C3202	1-126-934-11	ELECT 220MF 20% 16V	
C3203	1-107-682-11	CERAMIC CHIP 1MF 10% 16V	
C3204	1-126-964-11	ELECT 10MF 20% 50V	
C3205	1-126-964-11	ELECT 10MF 20% 50V	
C3206	1-126-964-11	ELECT 10MF 20% 50V	
C3207	1-126-964-11	ELECT 10MF 20% 50V	
C3208	1-107-682-11	CERAMIC CHIP 1MF 10% 16V	
C3209	1-136-159-00	FILM 0.033MF 5% 50V	
C3210	1-136-480-11	FILM 0.0015MF 5% 100V	
C3211	1-136-159-00	FILM 0.033MF 5% 50V	
C3212	1-126-934-11	ELECT 220MF 20% 16V	
C3215	1-126-934-11	ELECT 220MF 20% 16V	
C3216	1-126-964-11	ELECT 10MF 20% 50V	
C3217	1-126-964-11	ELECT 10MF 20% 50V	
C3218	1-126-964-11	ELECT 10MF 20% 50V	
C3219	1-126-964-11	ELECT 10MF 20% 50V	

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3220	1-126-934-11	ELECT	220MF	20%	16V
C3221	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C3222	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C3223	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3224	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3225	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C3226	1-131-351-00	TANTALUM	4.7MF	10%	35V
C3227	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C3228	1-131-351-00	TANTALUM	4.7MF	10%	35V
C3229	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
C3230	1-131-350-00	TANTALUM	3.3MF	10%	35V
C3231	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
C3232	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
C3233	1-131-350-00	TANTALUM	3.3MF	10%	35V
C3234	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
C3235	1-131-351-00	TANTALUM	4.7MF	10%	35V
C3236	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C3237	1-131-351-00	TANTALUM	4.7MF	10%	35V
C3238	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C3239	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3240	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3241	1-126-967-11	ELECT	47MF	20%	16V
C3242	1-136-170-00	FILM	0.27MF	5%	50V
C3243	1-126-964-11	ELECT	10MF	20%	50V
C3244	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C3245	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C3246	1-126-964-11	ELECT	10MF	20%	50V
C3247	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C3248	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C3249	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3250	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C3251	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C3252	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3253	1-163-023-00	CERAMIC CHIP	0.015MF	10%	50V
C3254	1-163-023-00	CERAMIC CHIP	0.015MF	10%	50V
C3255	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C3256	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C3257	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C3258	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C3259	1-126-933-11	ELECT	100MF	20%	16V
C3260	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3265	1-136-157-00	FILM	0.022MF	5%	50V
C3266	1-136-161-00	FILM	0.047MF	5%	50V
C3267	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3268	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3269	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C3270	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V

< CONNECTOR >

CN1101	1-695-300-11	CONNECTOR, BOARD TO BOARD 20P

< FERRITE BEAD >

FB1104	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH

< IC >

IC1205	8-759-257-64	IC TDA7317
IC3201	8-759-248-74	IC LA2785
IC3202	8-759-341-23	IC LV1011
IC3203	8-759-266-65	IC TDA6622-5

< COIL >

REF.NO.	PART NO.	DESCRIPTION			REMARK
L1203	1-408-419-00	INDUCTOR	68UH		
L3201	1-408-419-00	INDUCTOR	68UH		
L3202	1-408-419-00	INDUCTOR	68UH		

< TRANSISTOR >

Q1203	8-729-901-01	TRANSISTOR DTC144EK
Q1204	8-729-901-01	TRANSISTOR DTC144EK

< RESISTOR >

REF.NO.	PART NO.	DESCRIPTION			REMARK
JR3201	1-216-295-91	METAL GLAZE	0	5%	1/10W
JR3202	1-216-295-91	METAL GLAZE	0	5%	1/10W
R1131	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1132	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1246	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1247	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1248	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1249	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1250	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1251	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1252	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1253	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1254	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1255	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1256	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1257	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1258	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1259	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1260	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1261	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1262	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1263	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1264	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1265	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1266	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1267	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1268	1-216-295-91	METAL GLAZE	0	5%	1/10W
R1269	1-216-295-91	METAL GLAZE	0	5%	1/10W
R1270	1-216-033-00	METAL GLAZE	220	5%	1/10W
R1271	1-216-033-00	METAL GLAZE	220	5%	1/10W
R3201	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R3202	1-216-228-00	METAL GLAZE	18K	5%	1/3W
R3204	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3205	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3206	1-216-033-00	METAL GLAZE	220	5%	1/10W
R3207	1-216-033-00	METAL GLAZE	220	5%	1/10W
R3208	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3209	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3210	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3211	1-208-854-11	METAL CHIP	1M	0.50%	1/10W

< CRYSTAL >

X3201	1-579-125-11	VIBRATOR, CERAMIC

A

REF.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1632-297-A	A BOARD, COMPLETE (KV-S2951A/S2951D) *****************	
	*A-1632-347-A	A BOARD, COMPLETE (KV-S2953B) *****************	
	*A-1632-348-A	A BOARD, COMPLETE (KV-S2953E) *****************	
	*A-1632-349-A	A BOARD, COMPLETE (KV-S2951K) *****************	
	*A-1632-346-A	A BOARD, COMPLETE (KV-S2952U) *****************	
	4-201-023-01	SPACER, INSULATING	
	4-202-373-01	SPRING, IC	
	4-382-854-11	SCREW (M3X10), P, SW (+)	
		< CAPACITOR >	
C001	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C002	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C004	1-164-222-11	CERAMIC CHIP 0.22MF	25V
C007	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C008	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C009	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C010	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C012	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C014	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C016	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C017	1-164-222-11	CERAMIC CHIP 0.22MF	25V
C018	1-124-925-11	ELECT 2.2MF	20% 50V
C019	1-126-965-11	ELECT 22MF	20% 50V
C020	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C022	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C023	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C024	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C025	1-164-222-11	CERAMIC CHIP 0.22MF	25V
C026	1-164-222-11	CERAMIC CHIP 0.22MF	25V
C027	1-164-346-11	CERAMIC CHIP 1MF	16V
C028	1-126-964-11	ELECT 10MF	20% 50V
C032	1-163-185-00	CERAMIC CHIP 150PF	5% 50V
C042	1-164-346-11	CERAMIC CHIP 1MF	16V
C072	1-126-934-11	ELECT 220MF	20% 16V
C081	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
C103	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C104	1-126-934-11	ELECT 220MF	20% 16V
C105	1-126-965-11	ELECT 22MF	20% 50V
C106	1-124-927-11	ELECT 4.7MF	20% 50V (KV-S2951A/S2951D/S2953E/S2951K/S2952U)
	1-126-933-11	ELECT 100MF	20% 16V (KV-S2953B)
C107	1-126-934-11	ELECT 220MF	20% 16V
C120	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C201	1-163-078-11	CERAMIC CHIP 0.033MF	10% 25V
C202	1-163-078-11	CERAMIC CHIP 0.033MF	10% 25V
C203	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C204	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C205	1-126-964-11	ELECT 10MF	20% 50V
C206	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V (KV-S2951A/S2953B/S2951D/S2953E/S2951K)
C207	1-137-613-11	FILM 0.0018MF	2% 100V (KV-S2951A/S2953B/S2951D/S2953E/S2951K)
C208	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C209	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C210	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C211	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C212	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C213	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C214	1-126-967-11	ELECT 47MF	20% 50V
C215	1-126-967-11	ELECT 47MF	20% 50V
C218	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C219	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C220	1-124-925-11	ELECT 2.2MF	20% 50V
C221	1-124-925-11	ELECT 2.2MF	20% 50V
C222	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C223	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C224	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C225	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C226	1-163-011-11	CERAMIC CHIP 0.0015MF	10% 50V
C227	1-163-011-11	CERAMIC CHIP 0.0015MF	10% 50V
C228	1-124-925-11	ELECT 2.2MF	20% 50V
C229	1-124-925-11	ELECT 2.2MF	20% 50V
C230	1-136-177-00	FILM 1MF	5% 50V (KV-S2951A/S2953B/S2951D/S2953E/S2951K)
C231	1-136-177-00	FILM 1MF	5% 50V (KV-S2951A/S2953B/S2951D/S2953E/S2951K)
C232	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V (KV-S2951A/S2953B/S2951D/S2953E/S2951K)
C233	1-163-007-11	CERAMIC CHIP 680PF	10% 50V (KV-S2951A/S2953B/S2951D/S2953E/S2951K)
C234	1-126-964-11	ELECT 10MF	20% 50V
C235	1-126-964-11	ELECT 10MF	20% 50V
C236	1-126-933-11	ELECT 100MF	20% 16V
C237	1-104-665-11	ELECT 100MF	20% 25V
C238	1-136-165-00	FILM 0.1MF	5% 50V
C239	1-136-165-00	FILM 0.1MF	5% 50V
C240	1-104-665-11	ELECT 100MF	20% 25V
C242	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C243	1-126-967-11	ELECT 47MF	20% 16V
C248	1-163-185-00	CERAMIC CHIP 150PF	5% 50V (KV-S2951A/S2953B/S2951D/S2953E/S2951K)
C251	1-136-165-00	FILM 0.1MF	5% 50V
C252	1-136-165-00	FILM 0.1MF	5% 50V
C253	1-126-967-11	ELECT 47MF	20% 16V
C256	1-126-967-11	ELECT 47MF	20% 16V
C258	1-126-934-11	ELECT 220MF	20% 16V
C259	1-107-714-11	ELECT 10MF	20% 16V
C260	1-163-019-00	CERAMIC CHIP 0.0068MF	10% 50V
C261	1-163-019-00	CERAMIC CHIP 0.0068MF	10% 50V
C262	1-126-967-11	ELECT 47MF	20% 16V
C263	1-126-967-11	ELECT 47MF	20% 16V
C264	1-136-165-00	FILM 0.1MF	5% 50V
C265	1-136-165-00	FILM 0.1MF	5% 50V
C266	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C267	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C268	1-136-165-00	FILM 0.1MF	5% 50V
C269	1-136-165-00	FILM 0.1MF	5% 50V
C270	1-126-953-11	ELECT 2200MF	20% 35V
C271	1-126-953-11	ELECT 2200MF	20% 35V
C272	1-126-953-11	ELECT 2200MF	20% 35V
C273	1-126-953-11	ELECT 2200MF	20% 35V
C274	1-136-165-00	FILM 0.1MF	5% 50V
C275	1-136-165-00	FILM 0.1MF	5% 50V
C280	1-126-967-11	ELECT 47MF	20% 16V
C281	1-126-940-11	ELECT 330MF	20% 16V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C283	1-164-489-91	CERAMIC CHIP	0.22MF	10%	16V
C284	1-164-489-91	CERAMIC CHIP	0.22MF	10%	16V
C285	1-164-489-91	CERAMIC CHIP	0.22MF	10%	16V
C351	1-126-964-11	ELECT	10MF	20%	50V
C352	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C355	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C356	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C357	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C358	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C359	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C360	1-164-326-91	CERAMIC CHIP	0.47MF		16V
C361	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C362	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C364	1-126-964-11	ELECT	10MF	20%	50V
C372	1-126-964-11	ELECT	10MF	20%	50V
C373	1-126-964-11	ELECT	10MF	20%	50V
C580	1-126-964-11	ELECT	10MF	20%	50V
C581	1-124-902-00	ELECT	0.47MF	20%	50V
C582	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C585	1-126-967-11	ELECT	47MF	20%	16V
C586	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C587	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C588	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C589	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C590	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C591	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C592	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C593	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C594	1-126-967-11	ELECT	47MF	20%	50V
C681	1-104-664-11	ELECT	47MF	20%	25V
C682	1-126-967-11	ELECT	47MF	20%	16V
C683	1-104-664-11	ELECT	47MF	20%	25V
C684	1-104-664-11	ELECT	47MF	20%	25V
C685	1-126-967-11	ELECT	47MF	20%	16V
C686	1-126-967-11	ELECT	47MF	20%	16V
C687	1-126-967-11	ELECT	47MF	20%	16V
C688	1-126-967-11	ELECT	47MF	20%	16V
C689	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C690	1-126-967-11	ELECT	47MF	20%	16V
C691	1-126-967-11	ELECT	47MF	20%	16V
C692	1-126-967-11	ELECT	47MF	20%	16V
C693	1-126-967-11	ELECT	47MF	20%	16V
C1007	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1008	1-126-967-11	ELECT	47MF	20%	16V

< C1101 - C1157 FITTED ON >
< KV-S2953B/S2953E/S2952U >

REF.NO.	PART NO.	DESCRIPTION			REMARK
C1101	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C1102	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C1103	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1104	1-126-964-11	ELECT	10MF	20%	50V
C1105	1-126-964-11	ELECT	10MF	20%	50V
C1106	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1107	1-126-967-11	ELECT	47MF	20%	16V
C1108	1-126-964-11	ELECT	10MF	20%	50V
C1110	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C1111	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C1112	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C1113	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C1114	1-126-967-11	ELECT	47MF	20%	16V
C1115	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1116	1-126-967-11	ELECT	47MF	20%	16V
C1117	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1118	1-126-967-11	ELECT	47MF	20%	16V
C1119	1-126-967-11	ELECT	47MF	20%	16V
C1120	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C1121	1-164-299-11	CERAMIC CHIP	0.22MF	10%	25V
C1122	1-126-967-11	ELECT	47MF	20%	16V
C1123	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1124	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1125	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1126	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C1127	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C1128	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C1129	1-162-568-11	CERAMIC CHIP	0.33MF		25V
C1130	1-124-903-11	ELECT	1MF	20%	50V
C1131	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1132	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1133	1-126-967-11	ELECT	47MF	20%	16V
C1134	1-126-964-11	ELECT	10MF	20%	50V
C1135	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C1136	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1137	1-163-095-00	CERAMIC CHIP	12PF	5%	50V
C1139	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1142	1-164-299-11	CERAMIC CHIP	0.22MF	10%	25V
C1143	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1147	1-126-967-11	ELECT	47MF	20%	16V
C1148	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1150	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1151	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1152	1-126-967-11	ELECT	47MF	20%	16V
C1157	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1501	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C1502	1-124-903-11	ELECT	1MF	20%	50V
C1504	1-124-122-11	ELECT	100MF	20%	50V
C1505	1-137-371-11	FILM	0.015MF	5%	50V
C1506	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1507	1-106-383-00	MYLAR	0.047MF	10%	100V
C1508	1-137-423-11	MYLAR	0.15MF	10%	100V
C1510	1-130-789-00	FILM	1MF	5%	100V
C1511	1-126-941-11	ELECT	470MF	20%	25V
C1512	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1513	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1514	1-126-941-11	ELECT	470MF	20%	25V
C1518	1-124-927-11	ELECT	4.7MF	20%	50V
C1520	1-126-965-91	ELECT	22MF	20%	50V
C1521	1-107-698-11	ELECT	10MF	20%	25V
C1522	1-126-964-91	ELECT	10MF	20%	50V
C1523	1-104-664-11	ELECT	47MF	20%	25V
C1531	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C1532	1-126-964-11	ELECT	10MF	20%	50V
C1533	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C1534	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C1535	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C1537	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1539	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1540	1-126-967-11	ELECT	47MF	20%	50V
C1541	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C1542	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1543	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V

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REF.NO.	PART NO.	DESCRIPTION		REMARK
C1544	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C1545	1-107-823-11	CERAMIC CHIP 0.47MF	10%	16V
C1546	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C1547	1-164-695-11	CERAMIC CHIP 0.0022MF	5%	50V
C1548	1-163-055-00	CERAMIC CHIP 0.0047MF	10%	50V
C1549	1-163-055-00	CERAMIC CHIP 0.0047MF	10%	50V
C1550	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1551	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C1552	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C1553	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C1554	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C1555	1-126-967-11	ELECT 47MF	20%	50V
C1556	1-124-122-11	ELECT 100MF	20%	50V
C1558	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V
C1559	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V
C1560	1-124-902-00	ELECT 0.47MF	20%	50V
C1561	1-104-760-11	CERAMIC CHIP 0.047MF	10%	50V
C1562	1-163-117-91	CERAMIC CHIP 100P	5%	50V
C1563	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V
C1564	1-164-336-11	CERAMIC CHIP 0.33MF		25V
C1567	1-124-903-11	ELECT 1MF	20%	50V
C1568	1-164-344-11	CERAMIC CHIP 0.068MF	10%	25V
C1569	1-163-003-11	CERAMIC CHIP 330PF	10%	50V
C1570	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C1571	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C1572	1-126-934-91	ELECT 220MF	20%	16V
C1585	1-124-903-11	ELECT 1MF	20%	50V
C1586	1-124-902-00	ELECT 0.47MF	20%	50V
C1587	1-126-967-11	ELECT 47MF	20%	50V
C1588	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C1589	1-162-587-11	CERAMIC CHIP 0.039MF	10%	25V
C1590	1-164-346-11	CERAMIC CHIP 1MF		16V
C1591	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V
C1593	1-126-965-91	ELECT 22MF	20%	50V
C2001	1-163-235-11	CERAMIC CHIP 22PF	5%	50V
C2002	1-163-235-11	CERAMIC CHIP 22PF	5%	50V
C2003	1-164-222-11	CERAMIC CHIP 0.22MF		25V
C2004	1-164-222-11	CERAMIC CHIP 0.22MF		25V
C2005	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C2007	1-126-965-11	ELECT 22MF	20%	50V
C2008	1-164-222-11	CERAMIC CHIP 0.22MF		25V
C2010	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C2011	1-107-823-11	CERAMIC CHIP 0.47MF	10%	16V
C2012	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C2013	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C2014	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V
C2016	1-164-222-11	CERAMIC CHIP 0.22MF		25V
C2017	1-164-222-11	CERAMIC CHIP 0.22MF		25V
C2019	1-126-965-11	ELECT 22MF	20%	50V
C2020	1-164-346-11	CERAMIC CHIP 1MF		16V
C2024	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C2025	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C2027	1-164-222-11	CERAMIC CHIP 0.22MF		25V
C2031	1-163-031-11	CERAMIC CHIP 0.01MF		50V
C2032	1-126-933-11	ELECT 100MF	20%	16V
C2701	1-126-964-11	ELECT 10MF	20%	50V
C2702	1-126-967-11	ELECT 47MF	20%	16V
C2706	1-163-003-11	CERAMIC CHIP 330PF	10%	50V

REF.NO.	PART NO.	DESCRIPTION	REMARK
		< CONNECTOR >	
CN0001	*1-564-520-11	PLUG, CONNECTOR 5P	
CN0002	*1-568-878-51	PIN, CONNECTOR 3P	
CN0101	1-695-297-11	CONNECTOR, BOARD TO BOARD 20P	
CN0102	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P	
CN0103	1-764-608-11	CONNECTOR, BOARD TO BOARD 8P	
CN0104	1-764-608-11	CONNECTOR, BOARD TO BOARD 8P	
CN0105	1-764-608-11	CONNECTOR, BOARD TO BOARD 8P	
CN0106	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
CN0107	1-695-297-11	CONNECTOR, BOARD TO BOARD 20P	
CN0109	*1-900-900-67	PIN, CONNECTOR 1P	
CN0111	*1-568-882-51	PIN, CONNECTOR 7P	
CN0113	*1-568-879-11	PIN, CONNECTOR 4P	
CN0114	*1-564-511-11	PLUG, CONNECTOR 8P	
CN0115	*1-568-881-51	PIN, CONNECTOR 6P	
		< DIODE >	
D001	8-719-027-82	DIODE MA3039H-TX	
D003	8-719-914-42	DIODE DA204K	
D068	8-719-914-44	DIODE DAP202K	
D069	8-719-914-44	DIODE DAP202K	
D071	8-719-109-89	DIODE RD5.6ESB2	
D073	8-719-109-89	DIODE RD5.6ESB2	
D075	8-719-914-43	DIODE DAN202K	
D077	8-719-914-43	DIODE DAN202K	
D078	8-719-109-89	DIODE RD5.6ESB2	
D079	8-719-109-89	DIODE RD5.6ESB2	
D101	8-719-982-27	DIODE MTZJ-33C	
D201	8-719-914-42	DIODE DA204K (KV-S2951A/S2953B/S2951D/S2953E/S2951K)	
D251	8-719-991-33	DIODE 1SS133T-77	
D252	8-719-991-33	DIODE 1SS133T-77	
D253	8-719-991-33	DIODE 1SS133T-77	
D254	8-719-991-33	DIODE 1SS133T-77	
D255	8-719-914-43	DIODE DAN202K	
D256	8-719-991-33	DIODE 1SS133T-77	
D257	8-719-991-33	DIODE 1SS133T-77	
D258	8-719-991-33	DIODE 1SS133T-77	
D259	8-719-991-33	DIODE 1SS133T-77	
D260	8-719-991-33	DIODE 1SS133T-77	
D261	8-719-991-33	DIODE 1SS133T-77	
D262	8-719-991-33	DIODE 1SS133T-77	
D263	8-719-914-43	DIODE DAN202K	
D265	8-719-914-42	DIODE DA204K	
D351	8-719-991-33	DIODE 1SS133T-77	
D581	8-719-914-43	DIODE DAN202K	
D1001	8-719-914-44	DIODE DAP202K	
D1002	8-719-914-43	DIODE DAN202K	
D1003	8-719-914-43	DIODE DAN202K	
D1101	8-719-914-43	DIODE DAN202K (KV-S2953B/S2953E/S2952U)	
D1102	8-719-820-71	DIODE 1SV214 (KV-S2953B/S2953E/S2952U)	
D1503	8-719-908-03	DIODE GP08D	
D1504	8-719-110-41	DIODE RD15ESB2	
D1505	8-719-914-43	DIODE DAN202K	
D1510	8-719-914-42	DIODE DA204K	
D1511	8-719-982-03	DIODE MTZJ-3.6A	
D1530	8-719-914-43	DIODE DAN204K	
D1533	8-719-400-75	DIODE MA3091	
D1534	8-719-914-43	DIODE DAN202K	
D1536	8-719-105-82	DIODE RD5.1M-B2	

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	REMARK
D1538	8-719-914-43	DIODE DAN202K	
D1539	8-719-914-42	DIODE DA204K	
D1542	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D1543	8-719-914-42	DIODE DA204K	
D1544	8-719-914-42	DIODE DA204K	
D1545	8-719-914-42	DIODE DA204K	
D1546	8-719-923-46	DIODE MTZJ-T-77-6.8B	
D2001	8-719-036-58	DIODE MA3030-H(TX)	
D2004	8-719-914-43	DIODE DAN202K	
D2701	8-719-914-44	DIODE DAP202K	

< IC >

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC001	8-759-351-92	IC SDA30C164-2GEG	
IC002	8-759-353-77	IC TMS27PC020-15FMLAE307	
	1-750-797-11	SOCKET, PLCC ; IC002	
IC072	8-759-184-27	IC ST24C16CB1	
IC201	8-759-348-87	IC TDA6812-2MGEG	
IC202	8-759-502-21	IC TDA2822M	
IC251	8-759-190-89	IC TDA7265	
IC261	8-759-190-89	IC TDA7265	
IC351	8-759-183-36	IC TDA8443B	
IC572	8-752-070-54	IC CXA1839Q-T6	
IC681	8-759-518-68	IC PQ12RF21	
IC682	8-759-513-71	IC PQ05RF21	
IC683	8-759-908-15	IC TL431CLP	
IC684	8-759-195-63	IC PQ09RE11	
IC685	8-759-510-52	IC TEA7605	
IC1001	8-752-869-17	IC CXP85112B-622Q-TL	
IC1101	8-759-251-58	IC SAA7283GP (KV-S2953B/S2953E/S2952U)	
IC1501	8-759-192-71	IC STV9379	
IC1531	8-752-068-39	IC CXA1840S	
IC2001	8-759-248-91	IC SDA9086-5	
IC2002	8-759-337-48	IC SDA5273P-C26-GEG	
IC2003	8-759-188-60	IC MB81C4256A-70PSZG	
IC2701	8-759-603-37	IC M5216P	

< IF BLOCK >

REF.NO.	PART NO.	DESCRIPTION	REMARK
IFB101	1-473-191-11	IF BLOCK (KV-S2951A/S2951D/S2953E)	
	1-467-573-13	IF BLOCK (KV-S2953B)	
	1-467-873-12	IF BLOCK (KV-S2951K)	
	1-473-190-11	IF BLOCK (KV-S2952U)	

< COIL >

REF.NO.	PART NO.	DESCRIPTION	REMARK
L001	1-408-421-00	INDUCTOR 100UH	
L101	1-408-413-00	INDUCTOR 22UH	
L102	1-408-413-00	INDUCTOR 22UH	
L201	1-407-500-00	INDUCTOR 4.7MMH	
L1002	1-408-397-00	INDUCTOR 1UH	
L1101	1-412-004-31	INDUCTOR CHIP 6.8UH (KV-S2953B/S2953E/S2952U)	
L1102	1-408-419-00	INDUCTOR 68UH (KV-S2953B/S2953E/S2952U)	
L1103	1-408-419-00	INDUCTOR 68UH (KV-S2953B/S2953E/S2952U)	
L1501	1-412-524-11	INDUCTOR 8.2UH	
L1531	1-412-537-41	INDUCTOR 100UH	
L2001	1-410-674-31	INDUCTOR 82UH	
L2002	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	

< IC LINK >

REF.NO.	PART NO.	DESCRIPTION	REMARK
PS681	⚠ 1-532-637-91	LINK, IC (ICP-N25) 1.0A	

< TRANSISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q002	8-729-216-22	TRANSISTOR 2SA1162-G	
Q005	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q006	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q007	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q008	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q102	8-729-027-52	TRANSISTOR DTC124EKA-T146	
Q103	8-729-027-52	TRANSISTOR DTC124EKA-T146	
Q106	8-729-821-00	TRANSISTOR 2SA1207	
Q107	8-729-255-12	TRANSISTOR 2SC2551-O	
Q203	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-S2951A/S2953B/S2951D/S2953E/S2951K)	
Q252	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q253	8-729-216-22	TRANSISTOR 2SA1162-G	
Q254	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q255	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q256	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q257	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q258	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q281	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q282	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q351	8-729-216-22	TRANSISTOR 2SA1162-G	
Q352	8-729-216-22	TRANSISTOR 2SA1162-G	
Q571	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q581	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q681	8-729-032-65	TRANSISTOR 2SD2396H	
Q1001	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1105	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-S2953B/S2953E/S2952U)	
Q1106	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-S2953B/S2953E/S2952U)	
Q1107	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-S2953B/S2953E/S2952U)	
Q1108	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-S2953B/S2953E/S2952U)	
Q1503	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1504	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1505	8-729-931-45	TRANSISTOR IRF614	
Q1506	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1507	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1508	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q1510	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1511	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q1512	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q1531	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1532	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1533	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1544	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1545	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1547	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1548	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1549	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1550	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q2001	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q2002	8-729-920-74	TRANSISTOR 2SC2412KQR	
Q2004	8-729-027-52	TRANSISTOR DTC124EKA-T146	
Q2005	8-729-920-74	TRANSISTOR 2SC2412K-QR	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
Q2006	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q2008	8-729-027-52	TRANSISTOR DTC124EKA-T146	
Q2701	8-729-920-74	TRANSISTOR 2SC2412K-QR	

< RESISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
JR001	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR002	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR101	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR102	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR201	1-216-295-91	METAL GLAZE 0 5% 1/10W (KV-S2951A/S2951D/S2951K)	
JR202	1-216-295-91	METAL GLAZE 0 5% 1/10W (KV-S2951A/S2951D/S2951K)	
JR279	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR280	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR361	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR362	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR363	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR1013	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR1501	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR2002	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R001	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R002	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R003	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R004	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R006	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R007	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R008	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R009	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R010	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R012	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R014	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R016	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R017	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R018	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R020	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R021	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R025	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R028	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R029	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R030	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R031	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R032	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R033	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R034	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R035	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R036	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R037	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R038	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R047	1-216-101-00	METAL GLAZE 150K 5% 1/10W	
R048	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R049	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R050	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R051	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R052	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R054	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R062	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R067	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R068	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R069	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R072	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R073	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R074	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R077	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R083	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R085	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R101	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R102	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R105	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R108	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R109	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R110	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
R111	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R115	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R116	1-215-901-00	METAL OXIDE 33K 5% 2W	F
R121	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R127	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R130	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R131	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R201	1-216-655-11	METAL CHIP 1.5K 0.50% 1/10W	
R202	1-216-657-11	METAL CHIP 1.8K 0.50% 1/10W	
R203	1-216-655-11	METAL CHIP 1.5K 0.50% 1/10W	
R204	1-216-657-11	METAL CHIP 1.8K 0.50% 1/10W	
R205	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W (KV-S2951A/S2953B/S2951D/S2953E/S2951K)	
R206	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R207	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R208	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R209	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R210	1-247-734-11	CARBON 39 5% 1/2W	
R211	1-247-734-11	CARBON 39 5% 1/2W	
R212	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R213	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R214	1-216-025-91	METAL GLAZE 100 5% 1/10W (KV-S2951A/S2953B/S2951D/S2953E/S2951K)	
R218	1-249-389-11	CARBON 4.7 5% 1/4W	F
R219	1-249-389-11	CARBON 4.7 5% 1/4W	F
R221	1-216-091-00	METAL GLAZE 56K 5% 1/10W (KV-S2951A/S2953B/S2951D/S2953E/S2951K)	
R222	1-249-389-11	CARBON 4.7 5% 1/4W	F
R241	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W (KV-S2951A/S2953B/S2951D/S2953E/S2951K)	
R242	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R243	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R244	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R246	1-216-097-91	METAL GLAZE 100K 5% 1/10W (KV-S2951A/S2953B/S2951D/S2953E/S2951K)	
R247	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R248	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R249	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R250	1-216-065-91	METAL GLAZE 4.7K 5% 1/10W	
R251	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R253	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R257	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R258	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R259	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R260	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R261	1-216-065-91	METAL GLAZE 4.7K 5% 1/10W	
R262	1-216-357-00	METAL OXIDE 4.7 5% 1W	F
R263	1-216-357-00	METAL OXIDE 4.7 5% 1W	F
R264	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R265	1-216-079-91	METAL GLAZE 18K 5% 1/10W	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
R266	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R267	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R268	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R269	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R270	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R271	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R272	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R273	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R274	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R275	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R276	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R277	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R278	1-216-103-91	METAL GLAZE 180K 5% 1/10W	
R279	1-216-103-91	METAL GLAZE 180K 5% 1/10W	
R280	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R282	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R284	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R285	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R286	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R287	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R288	1-216-065-91	METAL GLAZE 4.7K 5% 1/10W	
R289	1-216-357-00	METAL OXIDE 4.7 5% 1W	F
R290	1-216-357-00	METAL OXIDE 4.7 5% 1W	F
R291	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R292	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R293	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R294	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R295	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R296	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R297	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R298	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R299	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R351	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R352	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R353	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R354	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R355	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R356	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R357	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R358	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R359	1-216-295-91	METAL GLAZE 0 5% 1/10W	(KV-S2953E/S2951K/S2952U)
R360	1-216-295-91	METAL GLAZE 0 5% 1/10W	(KV-S2953B)
R361	1-216-295-91	METAL GLAZE 0 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K/S2952U)
R362	1-216-295-91	METAL GLAZE 0 5% 1/10W	(KV-S2953B)
R364	1-216-295-91	METAL GLAZE 0 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K/S2952U)
R365	1-216-295-91	METAL GLAZE 0 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K/S2952U)
R366	1-216-295-91	METAL GLAZE 0 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K/S2952U)
R367	1-216-295-91	METAL GLAZE 0 5% 1/10W	(KV-S2953B)
R368	1-216-295-91	METAL GLAZE 0 5% 1/10W	(KV-S2953B)
R369	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R371	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R372	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R373	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R375	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R376	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R377	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R378	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R379	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R380	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R384	1-216-022-00	METAL GLAZE 75 5% 1/10W	
R385	1-216-022-00	METAL GLAZE 75 5% 1/10W	
R386	1-216-022-00	METAL GLAZE 75 5% 1/10W	
R575	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R576	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R578	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R579	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R580	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R581	1-216-685-11	METAL CHIP 27K 0.50% 1/10W	
R582	1-216-047-91	METAL GLAZE 820 5% 1/10W	
R583	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R584	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R587	1-216-017-91	METAL GLAZE 47 5% 1/10W	
R588	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R681	1-216-471-11	METAL OXIDE 27 5% 3W	F
R682	1-249-407-11	CARBON 150 5% 1/4W	
R683	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R684	1-249-419-11	CARBON 1.5K 5% 1/4W	
R685	1-247-807-31	CARBON 100 5% 1/4W	
R1001	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1005	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1006	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1007	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R1008	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1009	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1017	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R1018	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R1019	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1020	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1022	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1023	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1024	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1025	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1026	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1027	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1028	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
		< R1101 - R1114 FITTED ON > < KV-S2953B/S2953E/S2952U >	
R1101	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1102	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1103	1-216-134-00	METAL GLAZE 2.2 5% 1/8W	
R1104	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R1105	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R1106	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1107	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1108	1-216-121-91	METAL GLAZE 1M 5% 1/10W	
R1109	1-216-121-91	METAL GLAZE 1M 5% 1/10W	
R1110	1-216-150-91	METAL GLAZE 10 5% 1/8W	
R1111	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1112	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1113	1-216-117-00	METAL GLAZE 680K 5% 1/10W	
R1114	1-216-158-00	METAL GLAZE 22 5% 1/8W	

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< R1115 - R1151 FITTED ON >
< KV-S2953B/S2953E/S2952U >

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1115	1-216-121-91	METAL GLAZE	1M	5%	1/10W	
R1116	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1117	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1118	1-216-134-00	METAL GLAZE	2.2	5%	1/8W	
R1119	1-216-133-00	METAL GLAZE	3.3M	5%	1/10W	
R1124	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1125	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R1132	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R1133	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1144	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1145	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1146	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1147	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R1148	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1149	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1150	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R1151	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1501	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R1502	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R1503	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1504	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1505	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1506	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1509	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1512	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R1513	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R1514	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1515	1-215-455-00	METAL	27K	1%	1/4W	
R1516	1-249-385-11	CARBON	2.2	5%	1/4W	F
R1517	1-216-371-00	METAL OXIDE	1.5	5%	2W	F
R1519	1-216-475-11	METAL OXIDE	120	5%	3W	F
R1520	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R1521	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1522	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1523	1-216-105-91	METAL GLAZE	220K	5%	1/10W	
R1524	1-216-105-91	METAL GLAZE	220K	5%	1/10W	
R1526	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1527	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1529	1-216-057-91	METAL GLAZE	2.2K	5%	1/10W	
R1531	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1532	1-216-133-00	METAL GLAZE	3.3M	5%	1/10W	
R1534	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R1539	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1540	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1541	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R1542	1-216-182-00	METAL GLAZE	220	5%	1/8W	
R1543	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1544	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1545	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W	
R1546	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1547	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1548	1-216-295-91	METAL GLAZE	0	5%	1/10W	
R1549	1-216-045-91	METAL GLAZE	680	5%	1/10W	
R1553	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1554	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1555	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1556	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1557	1-216-037-91	METAL GLAZE	330	5%	1/10W	
R1558	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1561	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1562	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1563	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R1564	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1565	1-216-282-00	METAL GLAZE	3.3M	5%	1/8W	
R1568	1-216-103-91	METAL GLAZE	180K	5%	1/10W	
R1569	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
		(KV-S2951A/S2953B/S2951D/S2953E/S2952U)				
R1570	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R1571	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R1572	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
		(KV-S2951A/S2953B/S2951D/S2953E/S2952U)				
R1573	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1574	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1575	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R1576	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1577	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1578	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R1579	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
		(KV-S2951A/S2953B/S2951D/S2953E/S2952U)				
R1580	1-215-867-00	METAL OXIDE	470	5%	1W	F
R1581	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1582	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1583	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1584	1-208-822-11	METAL CHIP	47K	0.50%	1/10W	
R1585	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1586	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	
R1587	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	
R1588	1-216-295-91	METAL GLAZE	0	5%	1/10W	
R1589	1-216-295-91	METAL GLAZE	0	5%	1/10W	
R1591	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1592	1-216-069-91	METAL GLAZE	6.8K	5%	1/10W	
R1593	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1594	1-216-286-00	METAL GLAZE	4.7M	5%	1/8W	
R1595	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R1597	1-216-109-00	METAL GLAZE	330K	5%	1/10W	
R1601	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1602	1-216-129-00	METAL GLAZE	2.2M	5%	1/10W	
R1604	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W	
R1605	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1607	1-216-101-00	METAL GLAZE	150K	5%	1/10W	
R1608	1-216-119-00	METAL GLAZE	820K	5%	1/10W	
R1609	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R1610	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R1611	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1612	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1613	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R1615	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1616	1-216-105-91	METAL GLAZE	220K	5%	1/10W	
R1617	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1618	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R2002	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2003	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R2005	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R2007	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2008	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R2009	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R2010	1-216-025-91	METAL GLAZE	100	5%	1/10W	

A IF (KV-S2951A/S2951D/S2953E KV-S2951K/S2952U)

REF.NO.	PART NO.	DESCRIPTION	REMARK
R2011	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R2012	1-216-017-91	METAL GLAZE 47 5% 1/10W	
R2013	1-216-017-91	METAL GLAZE 47 5% 1/10W	
R2014	1-216-017-91	METAL GLAZE 47 5% 1/10W	
R2022	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R2023	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R2024	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R2025	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R2026	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R2029	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R2030	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R2031	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R2032	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R2033	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R2034	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R2035	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W	
R2036	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R2037	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R2038	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R2039	1-216-093-00	METAL GLAZE 68K 5% 1/10W	
R2040	1-216-125-00	METAL GLAZE 1.5M 5% 1/10W	
R2701	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R2702	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R2703	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R2704	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R2705	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2706	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2707	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R2708	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2713	1-216-295-91	METAL GLAZE 0 5% 1/10W	
		< THERMISTOR >	
TH1501	1-810-035-21	THERMISTOR	
		< TUNER >	
TU101	1-693-315-11	TUNER (UV1316)	(KV-S2951A/S2953B/S2951D/S2953E/S2951K)
	1-693-314-11	TUNER (U1344)	(KV-S2952U)
		< CRYSTAL >	
X1001	1-577-082-11	VIBRATOR, CERAMIC (4MHz)	
X1101	1-579-689-21	VIBRATOR, CRYSTAL (8.192MHz)	(KV-S2953B/S2953E/S2952U)
X1531	1-760-895-21	VIBRATOR, CERAMIC (2.69MHz)	
X2001	1-760-551-21	VIBRATOR, CERAMIC (20.5MHz)	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
	1-473-191-11	IF BLOCK (IFH-389WE) ********************	(KV-S2951A/S2951D/S2953E)
	1-467-873-12	IF BLOCK (IFH-389EE) ********************	(KV-S2951K)
	1-473-190-11	IF BLOCK (IFH-395GB) ********************	(KV-S2952U)
		< CAPACITOR >	
C01	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C02	1-164-299-11	CERAMIC CHIP 0.22MF 10% 25V	
C03	1-164-337-11	CERAMIC CHIP 2.2MF 16V	
C04	1-164-337-11	CERAMIC CHIP 2.2MF 16V	
C05	1-126-965-11	ELECT 22MF 20% 50V	
C06	1-126-965-11	ELECT 22MF 20% 50V	
C07	1-163-019-00	CERAMIC CHIP 0.0068MF 10% 50V	
C08	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C09	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C10	1-163-090-00	CERAMIC CHIP 7PF 0.25PF 50V	
C11	1-164-337-11	CERAMIC CHIP 2.2MF 16V	
C12	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C13	1-124-910-11	ELECT 47MF 20% 50V	
C14	1-124-910-11	ELECT 47MF 20% 50V	
C15	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C16	1-164-346-11	CERAMIC CHIP 1MF 16V	
C17	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C18	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C19	1-164-346-11	CERAMIC CHIP 1MF 16V	
C20	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C21	1-164-222-11	CERAMIC CHIP 0.22MF 25V	
C22	1-124-910-11	ELECT 47MF 20% 50V	
C23	1-124-910-11	ELECT 47MF 20% 50V	(KV-S2951A/S2951D/S2953E/S2951K)
C24	1-124-910-11	ELECT 47MF 20% 50V	
C25	1-124-910-11	ELECT 47MF 20% 50V	(KV-S2951A/S2951D/S2953E/S2951K)
C26	1-124-910-11	ELECT 47MF 20% 50V	
C27	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C28	1-124-910-11	ELECT 47MF 20% 50V	
C29	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C30	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C31	1-124-910-11	ELECT 47MF 20% 50V	
C32	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C33	1-163-086-00	CERAMIC CHIP 3PF 0.25PF 50V	
C34	1-124-910-11	ELECT 47MF 20% 50V	
C35	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C36	1-104-666-11	ELECT 220MF 20% 6.3V	(KV-S2951K)
C37	1-163-249-11	CERAMIC CHIP 82PF 5% 50V	(KV-S2951K)
C38	1-163-237-11	CERAMIC CHIP 27PF 5% 50V	(KV-S2951A/S2951D/S2953E)
	1-163-239-11	CERAMIC CHIP 33PF 5% 50V	(KV-S2951K)
	1-163-243-11	CERAMIC CHIP 47PF 5% 50V	(KV-S2952U)
C39	1-163-097-00	CERAMIC CHIP 15PF 5% 50V	(KV-S2951K)
		< FILTER >	
CF01	1-760-416-21	FILTER, CERAMIC	(KV-S2951A/S2951D/S2953E/S2951K)
CF02	1-760-449-11	FILTER, CERAMIC	(KV-S2951K)
CF03	1-760-450-11	FILTER, CERAMIC	(KV-S2951A/S2951D/S2953E/S2951K)
CF04	1-760-106-11	TRAP, CERAMIC	(KV-S2951A/S2951D/S2953E/S2951K)
	1-567-100-00	FILTER, CERAMIC	(KV-S2952U)
CF05	1-404-134-00	TRAP, CERAMIC (5.5MHZ)	(KV-S2951A/S2951D/S2953E/S2951K)
	1-409-333-00	TRAP, CERAMIC (6.0MHZ)	(KV-S2952U)
SAW01	1-760-538-11	FILTER, SURFACE WAVE	(KV-S2951A/S2951D/S2953E/S2951K)
	1-760-757-11	FILTER, SURFACE WAVE	(KV-S2952U)

IF (KV-S2951A/S2951D/S2953E KV-S2951K/S2952U)

REF.NO.	PART NO.	DESCRIPTION	REMARK
		< CONNECTOR >	
CN01	1-750-919-11	PIN, CONNECTOR (PC BOARD) 10P	
CN02	1-750-919-11	PIN, CONNECTOR (PC BOARD) 10P	
		< DIODE >	
D01	8-719-421-57	DIODE MA73-TX	(KV-S2951A/S2951D/S2953E/S2951K)
D02	8-719-421-57	DIODE MA73-TX	(KV-S2951A/S2951D/S2953E/S2951K)
	1-216-296-91	METAL GLAZE 0 5% 1/8W	(KV-S2952U)
D03	8-719-914-43	DIODE DAN202K	
		< IC >	
IC01	8-759-289-18	IC TDA9813T-T	
IC02	8-759-514-54	IC BA7046	
IC03	8-759-991-41	IC L78L05ACZ-AP	
		< COIL >	
L01	1-408-409-00	INDUCTOR 10UH	(KV-S2951A/S2951D/S2953E)
	1-408-407-00	INDUCTOR 6.8UH	(KV-S2951K)
	1-408-408-00	INDUCTOR 6.8UH	(KV-S2952U)
L02	1-403-686-11	COIL	
L03	1-408-419-00	INDUCTOR 68UH	
L04	1-408-419-00	INDUCTOR 68UH	
L05	1-410-790-41	INDUCTOR 0.56UH	
L06	1-408-419-00	INDUCTOR 68UH	
L07	1-408-408-00	INDUCTOR 8.2UH	(KV-S2951K)
		< TRANSISTOR >	
Q01	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q02	8-729-901-01	TRANSISTOR DTC144EK	(KV-S2951A/S2951D/S2953E/S2951K)
Q03	8-729-901-01	TRANSISTOR DTC144EK	(KV-S2951A/S2951D/S2953E/S2951K)
Q04	8-729-216-22	TRANSISTOR 2SA1162-G	
Q05	8-729-216-22	TRANSISTOR 2SA1162-G	
Q06	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q07	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q08	8-729-920-74	TRANSISTOR 2SC2412K-QR	(KV-S2951A/S2951D/S2953E/S2951K)
Q09	8-729-920-74	TRANSISTOR 2SC2412K-QR	(KV-S2951A/S2951D/S2953E/S2951K)
Q10	8-729-920-74	TRANSISTOR 2SC2412K-QR	(KV-S2951K)
		< RESISTOR >	
JR01	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR02	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR03	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR04	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR05	1-216-295-91	METAL GLAZE 0 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2952U)
JR06	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR10	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR11	1-216-296-91	METAL GLAZE 0 5% 1/8W	
R01	1-216-031-00	METAL GLAZE 180 5% 1/10W	
R02	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R03	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R04	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R05	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R06	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K)
R07	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K)
R08	1-216-039-00	METAL GLAZE 390 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K)
R09	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R10	1-216-081-00	METAL GLAZE 22K 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K)
R11	1-216-081-00	METAL GLAZE 22K 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K)
R12	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R13	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R14	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R15	1-216-035-00	METAL GLAZE 270 5% 1/10W	
R17	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R18	1-216-093-00	METAL GLAZE 68K 5% 1/10W	
R19	1-216-242-91	METAL GLAZE 68K 5% 1/8W	
R20	1-216-033-00	METAL GLAZE 180 5% 1/10W	(KV-S2951A/S2951D/S2953E)
	1-216-031-00	METAL GLAZE 180 5% 1/10W	(KV-S2951K/S2952U)
R21	1-216-049-91	METAL GLAZE 1K 5% 1/10W	(KV-S2951A/S2951D/S2953E)
	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	(KV-S2951K)
	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	(KV-S2952U)
R22	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R23	1-218-755-11	METAL CHIP 130K 0.50% 1/10W	
R24	1-216-206-00	METAL GLAZE 2.2K 5% 1/8W	
R25	1-216-107-00	METAL GLAZE 270K 5% 1/10W	
R26	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R27	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R28	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R29	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R30	1-216-198-91	METAL GLAZE 1K 5% 1/8W	
R31	1-216-198-91	METAL GLAZE 1K 5% 1/8W	
R32	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R33	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R34	1-216-095-00	METAL GLAZE 82K 5% 1/10W	
R35	1-216-083-00	METAL GLAZE 27K 5% 1/10W	
R36	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R37	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K)
R38	1-216-095-00	METAL GLAZE 82K 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K)
R39	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K)
R40	1-216-075-00	METAL GLAZE 12K 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K)
R41	1-216-083-00	METAL GLAZE 27K 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K)
R42	1-216-174-00	METAL GLAZE 100 5% 1/8W	
R43	1-216-037-00	METAL GLAZE 330 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K)
R44	1-216-037-00	METAL GLAZE 330 5% 1/10W	

IF (KV-S2951A/S2951D/S2953E KV-S2951K/S2952U)

IF (KV-S2953B)

REF.NO.	PART NO.	DESCRIPTION	REMARK
R45	1-216-198-91	METAL GLAZE 1K 5% 1/8W	(KV-S2951A/S2951D/S2953E/S2952U)
	1-216-194-00	METAL GLAZE 680 5% 1/8W	(KV-S2951K)
R46	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R47	1-216-198-91	METAL GLAZE 1K 5% 1/8W	
R48	1-216-049-91	METAL GLAZE 1K 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K)
R49	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R50	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R51	1-216-039-00	METAL GLAZE 390 5% 1/10W	(KV-S2951K)
R52	1-216-039-00	METAL GLAZE 390 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2951K)
R53	1-216-083-00	METAL GLAZE 27K 5% 1/10W	(KV-S2951K)
R54	1-216-075-00	METAL GLAZE 12K 5% 1/10W	(KV-S2951K)
R55	1-216-045-00	METAL GLAZE 680 5% 1/10W	(KV-S2951K)
R56	1-216-045-00	METAL GLAZE 680 5% 1/10W	(KV-S2951K)
R57	1-216-295-91	METAL GLAZE 0 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2952U)
	1-216-043-91	METAL GLAZE 560 5% 1/10W	(KV-S2951K)
R58	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R59	1-216-041-00	METAL GLAZE 470 5% 1/10W	(KV-S2951K)
R60	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	(KV-S2952U)
R61	1-216-025-91	METAL GLAZE 100 5% 1/10W	(KV-S2951A/S2951D/S2953E/S2952U)

< VARIABLE RESISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
RV01	1-241-786-11	RES, ADJ, CARBON 22K	

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1-467-573-13 IF BLOCK (IFH-389FX) (KV-S2953B)
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< CAPACITOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
C101	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C102	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C104	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C111	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C112	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C113	1-164-489-11	CERAMIC CHIP 0.22MF 10% 16V	
C114	1-124-925-11	ELECT 2.2MF 20% 50V	
C115	1-124-916-11	ELECT 22MF 20% 50V	
C116	1-124-916-11	ELECT 22MF 20% 50V	
C117	1-163-090-00	CERAMIC CHIP 7PF 0.25PF 50V	
C120	1-124-925-11	ELECT 2.2MF 20% 50V	
C121	1-124-925-11	ELECT 2.2MF 20% 50V	
C122	1-164-489-11	CERAMIC CHIP 0.22MF 10% 16V	
C123	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C126	1-163-085-00	CERAMIC CHIP 2PF 0.25PF 50V	
C128	1-164-489-11	CERAMIC CHIP 0.22MF 10% 16V	
C131	1-163-113-00	CERAMIC CHIP 68PF 5% 50V	
C132	1-163-097-00	CERAMIC CHIP 15PF 5% 50V	
C133	1-163-113-00	CERAMIC CHIP 68PF 5% 50V	
C134	1-163-239-11	CERAMIC CHIP 33PF 5% 50V	
C135	1-124-477-11	ELECT 47MF 20% 16V	
C141	1-163-249-11	CERAMIC CHIP 82PF 5% 50V	
C143	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C145	1-124-477-11	ELECT 47MF 20% 16V	
C151	1-124-477-11	ELECT 47MF 20% 16V	
C152	1-124-477-11	ELECT 47MF 20% 16V	
C161	1-124-477-11	ELECT 47MF 20% 16V	
C162	1-124-477-11	ELECT 47MF 20% 16V	
C173	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C174	1-163-227-11	CERAMIC CHIP 10PF 0.5PF 50V	
C175	1-163-227-11	CERAMIC CHIP 10PF 0.5PF 50V	
C177	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C191	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C201	1-164-346-11	CERAMIC CHIP 1MF 16V	
C202	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C203	1-124-477-11	ELECT 47MF 20% 16V	
C204	1-164-346-11	CERAMIC CHIP 1MF 16V	
C205	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C206	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C207	1-164-222-11	CERAMIC CHIP 0.22MF 25V	
C208	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C302	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C502	1-124-477-11	ELECT 47MF 20% 16V	
C503	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C901	1-124-477-11	ELECT 47MF 20% 16V	
C902	1-163-059-91	CERAMIC CHIP 0.01MF 10% 50V	

< FILTER >

REF.NO.	PART NO.	DESCRIPTION	REMARK
CF171	1-567-100-00	FILTER, CERAMIC	
CF172	1-567-101-11	FILTER, CERAMIC	
CF173	1-760-107-21	FILTER, CERAMIC	
CF174	1-760-106-21	FILTER, CERAMIC	
SWF101	1-579-273-11	FILTER, SURFACE WAVE	
SWF103	1-760-244-21	FILTER, SURFACE WAVE	

< CONNECTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN1	1-750-919-11	PIN, CONNECTOR (PC BOARD) 10P	
CN2	1-750-919-11	PIN, CONNECTOR (PC BOARD) 10P	

< TRIMMER >

REF.NO.	PART NO.	DESCRIPTION	REMARK
CT101	1-760-154-21	TRAP, CERAMIC	
CT131	1-409-430-11	TRAP, CERAMIC	

< DIODE >

REF.NO.	PART NO.	DESCRIPTION	REMARK
D101	8-719-914-43	DIODE DAN202K	
D171	8-719-914-43	DIODE DAN202K	
D201	8-719-914-43	DIODE DAN202K	

< IC >

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC1	8-759-193-13	IC TDA9815	
IC2	8-759-514-54	IC BA7046	
IC3	8-752-069-79	IC CXA1875M	
IC4	8-759-710-86	IC NJM2233BM	

< COIL >

REF.NO.	PART NO.	DESCRIPTION	REMARK
L101	1-408-419-00	INDUCTOR 68UH	
L102	1-410-985-11	INDUCTOR CHIP 0.22UH	
L131	1-408-407-00	INDUCTOR 6.8UH	

IF (KV-S2953B)

REF.NO.	PART NO.	DESCRIPTION		REMARK
L132	1-410-426-21	INDUCTOR	39UH	
L142	1-408-409-00	INDUCTOR	10UH	
L171	1-408-609-41	INDUCTOR	33UH	
L201	1-408-419-00	INDUCTOR	68UH	
L501	1-408-411-00	INDUCTOR	15UH	
L901	1-408-411-00	INDUCTOR	15UH	

< TRANSISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q101	8-729-104-80	TRANSISTOR 2SC3355	
Q102	8-729-901-01	TRANSISTOR DTC144EK	
Q104	8-729-901-01	TRANSISTOR DTC144EK	
Q121	8-729-216-22	TRANSISTOR 2SA1162-G	
Q131	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q132	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q141	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q142	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q151	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q152	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q153	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q154	8-729-901-01	TRANSISTOR DTC144EK	
Q161	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q162	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q171	8-729-216-22	TRANSISTOR 2SA1162-G	
Q174	8-729-901-01	TRANSISTOR DTC144EK	
Q175	8-729-901-01	TRANSISTOR DTC144EK	
Q176	8-729-901-01	TRANSISTOR DTC144EK	
Q181	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q191	8-729-216-22	TRANSISTOR 2SA1162-G	
Q201	8-729-216-22	TRANSISTOR 2SA1162-G	

< RESISTOR >

REF.NO.	PART NO.	DESCRIPTION				REMARK
JR101	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR102	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR103	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR104	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR106	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR107	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR109	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR110	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR111	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR112	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR113	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR114	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR115	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR116	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR117	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR118	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR119	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR120	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR121	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR122	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR123	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR124	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR125	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR126	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR127	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR128	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR129	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR130	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR131	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR132	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR133	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR134	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR135	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR136	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR137	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR138	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR140	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR141	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR142	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR143	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR145	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR146	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR150	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR152	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR154	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR160	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR161	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR162	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR166	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR167	1-216-296-00	METAL GLAZE	0	5%	1/8W	
R100	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R102	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R103	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R104	1-216-176-11	METAL GLAZE	120	5%	1/8W	
R105	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R106	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R107	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R109	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R111	1-216-295-91	METAL GLAZE	0	5%	1/10W	
R113	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R114	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R115	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R116	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R117	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R118	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R120	1-216-180-00	METAL GLAZE	180	5%	1/8W	
R131	1-216-198-91	METAL GLAZE	1K	5%	1/8W	
R133	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R134	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R135	1-216-295-91	METAL GLAZE	0	5%	1/10W	
R136	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R137	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R138	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R139	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R140	1-216-295-91	METAL GLAZE	0	5%	1/10W	
R142	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R144	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R145	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R146	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R147	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R148	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R149	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R151	1-216-226-00	METAL GLAZE	15K	5%	1/8W	
R152	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R153	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R154	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R155	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R156	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R161	1-216-079-00	METAL GLAZE	18K	5%	1/10W	

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION			REMARK
R162	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R163	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R164	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R165	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R166	1-216-037-00	METAL GLAZE	330	5%	1/10W
R167	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R168	1-216-212-00	METAL GLAZE	3.9K	5%	1/8W
R169	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R171	1-216-045-00	METAL GLAZE	680	5%	1/10W
R177	1-216-025-00	METAL GLAZE	100	5%	1/10W
R178	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R179	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R180	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R181	1-216-041-00	METAL GLAZE	470	5%	1/10W
R182	1-216-041-00	METAL GLAZE	470	5%	1/10W
R183	1-216-192-00	METAL GLAZE	560	5%	1/8W
R184	1-216-043-00	METAL GLAZE	560	5%	1/10W
R185	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R191	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R192	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R193	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R194	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R195	1-216-216-00	METAL GLAZE	5.6K	5%	1/8W
R201	1-216-198-91	METAL GLAZE	1K	5%	1/8W
R202	1-216-107-00	METAL GLAZE	270K	5%	1/10W
R203	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R204	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R205	1-218-755-11	METAL CHIP	130K	0.50%	1/10W
R206	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R207	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R208	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R209	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R210	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R211	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R301	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R302	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R303	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R306	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R308	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R309	1-216-025-00	METAL GLAZE	100	5%	1/10W
R310	1-216-025-00	METAL GLAZE	100	5%	1/10W

< VARIABLE RESISTOR >

REF.NO.	PART NO.	DESCRIPTION
RV111	1-241-786-11	RES, ADJ, CARBON 22K
RV112	1-241-765-11	RES, ADJ, CARBON 22K

< TRANSFORMER >

REF.NO.	PART NO.	DESCRIPTION
T111	1-403-686-22	COIL

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REF.NO.	PART NO.	DESCRIPTION
	*A-1636-010-A	G BOARD, COMPLETE *****************
	4-368-683-21	SPRING, TRANSISTOR
	4-382-854-11	SCREW (M3X10), P, SW (+)

< CAPACITOR >

REF.NO.	PART NO.	DESCRIPTION			REMARK
C602	1-165-127-11	CERAMIC	470PF	10%	500V
C603	1-165-127-11	CERAMIC	470PF	10%	500V
C604	1-136-171-00	FILM	0.33MF	5%	50V
C605	1-137-399-11	FILM	0.1MF	5%	50V
C606	1-136-171-00	FILM	0.33MF	5%	50V
C607	1-137-399-11	FILM	0.1MF	5%	50V
C608	1-164-625-11	CERAMIC	680PF	10%	500V
C609	1-129-718-00	FILM	0.022MF	5%	630V
C610	1-126-953-11	ELECT	2200MF	20%	35V
C611	1-126-953-11	ELECT	2200MF	20%	35V
C613	1-128-548-11	ELECT	4700MF	20%	25V
C614	1-128-548-11	ELECT	4700MF	20%	25V
C615	1-110-626-11	ELECT	330MF	20%	160V
C616	1-164-625-11	CERAMIC	680PF	10%	500V
C617	1-136-559-11	MYLAR	0.0047MF	10%	400V
C618	1-104-889-91	MYLAR	0.0022MF	10%	400V
C619	1-136-165-00	FILM	0.1MF	5%	50V
C620	1-126-519-12	ELECT	47MF	20%	50V
C621	⚠ 1-136-518-12	FILM	0.47MF	20%	300V
C622	⚠ 1-136-415-51	FILM	0.33MF	20%	300V
C624	⚠ 1-164-503-61	CERAMIC	0.0022MF	20%	400V
C626	⚠ 1-164-503-61	CERAMIC	0.0022MF	20%	400V
C627	1-126-940-11	ELECT	330MF	20%	25V
C628	1-126-965-11	ELECT	22MF	20%	50V
C629	1-162-599-12	CERAMIC	0.0047MF		250V
C630	1-162-599-12	CERAMIC	0.0047MF		250V
C631	⚠ 1-161-964-91	CERAMIC	0.0047MF		250V
C633	1-125-555-11	ELECT	330MF	20%	400V
C635	1-136-165-00	FILM	0.1MF	5%	50V
C636	1-136-165-00	FILM	0.1MF	5%	50V
C637	1-126-964-11	ELECT	10MF	20%	50V
C638	1-126-964-11	ELECT	10MF	20%	50V
C639	1-126-964-11	ELECT	10MF	20%	50V
C645	1-102-002-91	CERAMIC	680PF	10%	500V
C646	1-136-171-00	FILM	0.33MF	5%	50V
C647	1-136-171-00	FILM	0.33MF	5%	50V
C650	1-126-964-11	ELECT	10MF	20%	50V
C651	1-136-171-00	FILM	0.33MF	5%	50V
C652	1-136-171-00	FILM	0.33MF	5%	50V
C653	1-136-169-00	FILM	0.22MF	5%	50V

< CONNECTOR >

REF.NO.	PART NO.	DESCRIPTION
CN0008	⚠ 1-508-786-11	PIN, CONNECTOR (5MM PITCH) 2P
CN0009	⚠ 1-508-765-11	PIN, CONNECTOR (5MM PITCH) 3P
CN0701	*1-564-516-11	PLUG, CONNECTOR 13P
CN0722	⚠ *1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P

< DIODE >

REF.NO.	PART NO.	DESCRIPTION
D601	8-719-510-53	DIODE D4SB60L
D602	8-719-991-33	DIODE 1SS133T-77
D603	8-719-109-89	DIODE RD5.6ESB2
D605	8-719-047-31	DIODE RBA-402L
D607	8-719-510-12	DIODE D10SC4M
D608	8-719-510-12	DIODE D10SC4M
D609	8-719-047-31	DIODE RBA-402L
D610	8-719-510-64	DIODE S2LA20F
D612	8-719-911-19	DIODE 1SS119-25
D613	8-719-911-19	DIODE 1SS119-25
D614	8-719-911-19	DIODE 1SS119-25
D615	8-719-911-19	DIODE 1SS119-25
D616	8-719-911-19	DIODE 1SS119-25
D617	8-719-911-19	DIODE 1SS119-25
D618	8-719-911-19	DIODE 1SS119-25

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REF.NO.	PART NO.	DESCRIPTION	REMARK
D619	8-719-911-19	DIODE 1SS119-25	
D620	8-719-911-19	DIODE 1SS119-25	
D621	8-719-911-19	DIODE 1SS119-25	
D622	8-719-510-64	DIODE S2LA20F	
D623	8-719-510-64	DIODE S2LA20F	
D624	8-719-312-39	DIODE R2K-V1	
D625	8-719-911-19	DIODE 1SS119-25	
D626	8-719-911-19	DIODE 1SS119-25	
D627	8-719-911-19	DIODE 1SS119-25	
D628	8-719-911-19	DIODE 1SS119-25	
D630	8-719-991-33	DIODE 1SS133T-77	
D631	8-719-991-33	DIODE 1SS133T-77	
D632	8-719-991-33	DIODE 1SS133T-77	
D633	8-719-991-33	DIODE 1SS133T-77	
D634	8-719-991-33	DIODE 1SS133T-77	

< FERRITE BEAD >

REF.NO.	PART NO.	DESCRIPTION	REMARK
FB603	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	

< IC >

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC601	1-810-051-11	POWER MODULE DM-48	
IC602	⚠ 8-749-010-64	PHOTO COUPLER PC123F2	

< COIL >

REF.NO.	PART NO.	DESCRIPTION	REMARK
L601	1-412-525-41	INDUCTOR 10UH	
L602	1-412-525-41	INDUCTOR 10UH	
L603	1-412-525-41	INDUCTOR 10UH	
L605	1-412-523-11	INDUCTOR 6.8UH	
L606	1-412-523-11	INDUCTOR 6.8UH	

< TRANSFORMER >

REF.NO.	PART NO.	DESCRIPTION	REMARK
LF601	⚠ 1-424-436-11	TRANSFORMER, LINE FILTER	
T601	⚠ 1-429-255-11	TRANSFORMER, CONVERTER (PIT)	
T602	⚠ 1-427-864-11	TRANSFORMER, CONVERTER (PRT)	

< IC LINK >

REF.NO.	PART NO.	DESCRIPTION	REMARK
PS601	⚠ 1-532-686-91	LINK, IC (ICP-N75) 2.7A	
PS602	⚠ 1-532-686-91	LINK, IC (ICP-N75) 2.7A	
PS604	⚠ 1-532-686-91	LINK, IC (ICP-N75) 2.7A	
PS605	⚠ 1-532-845-21	LINK, IC (PRF4000) 4A	

< TRANSISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q601	8-729-032-87	TRANSISTOR 2SC4834NP-F09	
Q602	8-729-032-87	TRANSISTOR 2SC4834NP-F09	
Q603	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q604	8-729-200-21	TRANSISTOR 2SC2500-B	
Q605	8-729-173-38	TRANSISTOR 2SA733-K	
Q606	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q607	8-729-029-56	TRANSISTOR DTA144ESA	
Q608	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q610	8-729-173-38	TRANSISTOR 2SA733-K	
Q611	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q612	8-729-173-38	TRANSISTOR 2SA733-K	
Q613	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q614	8-729-029-56	TRANSISTOR DTA144ESA	
Q615	8-729-200-21	TRANSISTOR 2SC2500-B	
Q616	8-729-030-03	TRANSISTOR DTC144ESA-TP	
Q617	8-729-029-56	TRANSISTOR DTA144ESA	

< RESISTOR >

REF.NO.	PART NO.	DESCRIPTION				REMARK
R601	1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R602	1-247-891-00	CARBON	330K	5%	1/4W	
R603	1-247-891-00	CARBON	330K	5%	1/4W	
R604	1-216-369-00	METAL OXIDE	1	5%	2W	F
R605	1-247-891-00	CARBON	330K	5%	1/4W	
R606	1-247-891-00	CARBON	330K	5%	1/4W	
R607	1-216-369-00	METAL OXIDE	1	5%	2W	F
R608	1-247-887-00	CARBON	220K	5%	1/4W	
R609	1-249-429-11	CARBON	10K	5%	1/4W	F
R610	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R616	⚠ 1-205-949-11	WIREWOUND	1.8	5%	10W	
R618	⚠ 1-205-949-11	WIREWOUND	1.8	5%	10W	
R619	⚠ 1-244-945-91	CARBON	1M	5%	1/2W	
R620	⚠ 1-218-265-91	METAL	8.2M	5%	1W	
R621	1-249-417-11	CARBON	1K	5%	1/4W	F
R622	1-249-430-11	CARBON	12K	5%	1/4W	
R623	1-249-436-11	CARBON	39K	5%	1/4W	
R624	1-249-425-11	CARBON	4.7K	5%	1/4W	
R625	1-247-815-91	CARBON	220	5%	1/4W	
R626	1-247-863-91	CARBON	22K	5%	1/4W	
R627	1-247-815-91	CARBON	220	5%	1/4W	
R628	1-249-411-11	CARBON	330	5%	1/4W	
R630	1-249-429-11	CARBON	10K	5%	1/4W	
R631	1-215-477-00	METAL	220K	1%	1/4W	
R632	1-249-417-11	CARBON	1K	5%	1/4W	
R633	1-249-429-11	CARBON	10K	5%	1/4W	
R634	1-247-895-91	CARBON	470K	5%	1/4W	
R635	1-249-417-11	CARBON	1K	5%	1/4W	
R636	1-207-905-00	WIREWOUND	0.27	10%	2W	F
R637	1-249-389-11	CARBON	4.7	5%	1/4W	F
R638	1-249-425-11	CARBON	4.7K	5%	1/4W	
R639	1-247-791-91	CARBON	22	5%	1/4W	
R640	1-247-791-91	CARBON	22	5%	1/4W	
R641	1-247-791-91	CARBON	22	5%	1/4W	
R642	1-247-791-91	CARBON	22	5%	1/4W	
R644	1-249-425-11	CARBON	4.7K	5%	1/4W	
R645	1-249-415-11	CARBON	680	5%	1/4W	
R646	1-249-403-11	CARBON	68	5%	1/4W	
R647	1-249-429-11	CARBON	10K	5%	1/4W	
R651	1-215-880-00	METAL OXIDE	10	5%	2W	F
R652	1-247-891-00	CARBON	330K	5%	1/4W	
R653	1-247-891-00	CARBON	330K	5%	1/4W	
R654	1-247-891-00	CARBON	330K	5%	1/4W	
R655	1-247-891-00	CARBON	330K	5%	1/4W	
R656	1-249-439-11	CARBON	68K	5%	1/4W	
R657	1-249-429-11	CARBON	10K	5%	1/4W	
R658	1-249-421-11	CARBON	2.2K	5%	1/4W	
R659	1-249-425-11	CARBON	4.7K	5%	1/4W	
R660	1-249-429-11	CARBON	10K	5%	1/4W	
R661	1-249-421-11	CARBON	2.2K	5%	1/4W	
R662	1-249-421-11	CARBON	2.2K	5%	1/4W	
R663	1-249-429-11	CARBON	10K	5%	1/4W	
R664	1-249-429-11	CARBON	10K	5%	1/4W	
R665	1-249-425-11	CARBON	4.7K	5%	1/4W	

< RELAY >

REF.NO.	PART NO.	DESCRIPTION	REMARK
RY601	⚠ 1-515-720-31	RELAY	

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< THERMISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
THP601	⚠ **1-809-827-11**	**THERMISTOR, POSITIVE**	

< VARISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
VDR601	1-810-977-11	VARISTOR	

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*A-1638-071-A C BOARD, COMPLETE
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4-382-854-11 SCREW (M3X10), P, SW (+)

< CAPACITOR >

REF.NO.	PART NO.	DESCRIPTION				REMARK
C701	1-162-114-00	CERAMIC	0.0047MF		2KV	
C703	1-107-651-11	ELECT	4.7MF	20%	250V	
C711	1-101-880-00	CERAMIC	47PF	5%	50V	
C712	1-102-978-00	CERAMIC	220PF	5%	50V	
C713	1-102-980-00	CERAMIC	270PF	5%	50V	
C714	1-102-980-00	CERAMIC	270PF	5%	50V	
C716	1-128-526-11	ELECT	100MF	20%	16V	
C720	1-162-116-00	CERAMIC	680PF	10%	2KV	

< CONNECTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN0003	1-695-915-11	TAB (CONTACT)	
CN0004	1-695-915-11	TAB (CONTACT)	
CN0411	*1-568-882-11	PIN, CONNECTOR 7P	
CN0421	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P	

< DIODE >

REF.NO.	PART NO.	DESCRIPTION	REMARK
D701	8-719-991-33	DIODE 1SS133T-77	
D702	8-719-991-33	DIODE 1SS133T-77	
D703	8-719-991-33	DIODE 1SS133T-77	
D704	8-719-991-33	DIODE 1SS133T-77	
D705	8-719-991-33	DIODE 1SS133T-77	
D706	8-719-991-33	DIODE 1SS133T-77	
D707	8-719-991-33	DIODE 1SS133T-77	
D708	8-719-991-33	DIODE 1SS133T-77	
D709	8-719-991-33	DIODE 1SS133T-77	
D714	8-719-109-97	DIODE RD6.8ES-B2	
D715	8-719-018-82	DIODE RGP02-20EL-6394	

< CRT SOCKET >

REF.NO.	PART NO.	DESCRIPTION	REMARK
J701	⚠ **1-526-990-14**	**SOCKET, CRT**	

< COIL >

REF.NO.	PART NO.	DESCRIPTION		REMARK
L701	1-408-413-00	INDUCTOR	22UH	
L702	1-408-413-00	INDUCTOR	22UH	
L703	1-408-409-00	INDUCTOR	10UH	
L704	1-408-413-00	INDUCTOR	22UH	
L705	1-408-409-00	INDUCTOR	10UH	
L706	1-408-413-00	INDUCTOR	22UH	
L707	1-408-409-00	INDUCTOR	10UH	

< TRANSISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q701	8-729-326-11	TRANSISTOR 2SC2611	
Q702	8-729-326-11	TRANSISTOR 2SC2611	
Q703	8-729-326-11	TRANSISTOR 2SC2611	
Q704	8-729-326-11	TRANSISTOR 2SC2611	
Q705	8-729-326-11	TRANSISTOR 2SC2611	
Q706	8-729-326-11	TRANSISTOR 2SC2611	
Q707	8-729-200-17	TRANSISTOR 2SA1091-O	
Q708	8-729-200-17	TRANSISTOR 2SA1091-O	
Q709	8-729-200-17	TRANSISTOR 2SA1091-O	
Q710	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q711	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q712	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q714	8-729-255-12	TRANSISTOR 2SC2551-O	
Q715	8-729-173-38	TRANSISTOR 2SA733-K	

< RESISTOR >

REF.NO.	PART NO.	DESCRIPTION				REMARK
R701	1-202-846-00	SOLID	470K	20%	1/2W	
R702	1-202-838-00	SOLID	100K	20%	1/2W	
R703	1-202-838-00	SOLID	100K	20%	1/2W	
R705	1-249-377-11	CARBON	0.47	5%	1/4W	F
R706	1-249-377-11	CARBON	0.47	5%	1/4W	F
R707	1-249-416-11	CARBON	820	5%	1/4W	
R708	1-249-416-11	CARBON	820	5%	1/4W	
R709	1-249-416-11	CARBON	820	5%	1/4W	
R710	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F
R711	1-202-549-00	SOLID	100	20%	1/2W	
R712	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F
R713	1-202-549-00	SOLID	100	20%	1/2W	
R714	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F
R715	1-202-549-00	SOLID	100	20%	1/2W	
R716	1-249-405-11	CARBON	100	5%	1/4W	F
R717	1-249-405-11	CARBON	100	5%	1/4W	F
R718	1-249-405-11	CARBON	100	5%	1/4W	F
R725	1-249-421-11	CARBON	2.2K	5%	1/4W	
R726	1-249-421-11	CARBON	2.2K	5%	1/4W	
R727	1-249-421-11	CARBON	2.2K	5%	1/4W	
R728	1-249-407-11	CARBON	150	5%	1/4W	
R729	1-249-407-11	CARBON	150	5%	1/4W	
R730	1-249-407-11	CARBON	150	5%	1/4W	
R731	1-247-791-91	CARBON	22	5%	1/4W	
R732	1-247-791-91	CARBON	22	5%	1/4W	
R733	1-247-791-91	CARBON	22	5%	1/4W	
R734	1-202-549-00	SOLID	100	20%	1/2W	
R738	1-249-401-11	CARBON	47	5%	1/4W	
R739	1-249-401-11	CARBON	47	5%	1/4W	
R740	1-249-401-11	CARBON	47	5%	1/4W	
R743	1-249-435-11	CARBON	33K	5%	1/4W	
R747	1-216-489-11	METAL OXIDE	27K	5%	3W	F
R749	1-216-489-11	METAL OXIDE	27K	5%	3W	F
R751	1-216-489-11	METAL OXIDE	27K	5%	3W	F
R753	1-249-429-11	CARBON	10K	5%	1/4W	
R767	1-249-437-11	CARBON	47K	5%	1/4W	
R768	1-249-417-11	CARBON	1K	5%	1/4W	

< VARIABLE RESISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
RV702	1-241-714-11	RES, ADJ, METAL FILM 110M	

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*A-1640-183-A D BOARD, COMPLETE
****

4-200-399-01 SPACER, IC
4-382-854-11 SCREW (M3X10), P, SW (+)

D

REF.NO.	PART NO.	DESCRIPTION			REMARK
		< CAPACITOR >			
C801	1-123-024-21	ELECT	33MF		160V
C802	1-136-207-11	FILM	0.047MF	10%	250V
C804	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C805	1-102-030-00	CERAMIC	330PF	10%	500V
C808	1-162-116-00	CERAMIC	680PF	10%	2KV
C809	1-162-116-00	CERAMIC	680PF	10%	2KV
C810	1-106-367-00	MYLAR	0.01MF	10%	400V
C811	1-109-948-11	FILM	0.0015MF	3%	1.8KV
C812	1-129-722-00	FILM	0.047MF	5%	630V
C813	1-109-961-11	FILM	0.75MF	5%	400V
C814	1-129-702-00	FILM	0.001MF	10%	400V
C816	1-110-969-11	FILM	0.89MF	5%	400V
C819	1-137-104-91	FILM	0.033MF	10%	250V
C822	1-126-967-11	ELECT	47MF	20%	50V
C823	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C824	1-162-117-00	CERAMIC	100PF	10%	500V
C825	1-126-964-91	ELECT	10MF	20%	50V
C827	1-102-228-00	CERAMIC	470PF	10%	500V
C835	1-107-655-11	ELECT	47MF	20%	250V
C836	1-102-228-00	CERAMIC	470PF	10%	500V
C837	1-102-228-00	CERAMIC	470PF	10%	500V
C838	1-102-228-00	CERAMIC	470PF	10%	500V
C839	1-126-941-11	ELECT	470MF	20%	25V
C840	1-126-941-11	ELECT	470MF	20%	25V
C841	1-106-375-12	MYLAR	0.022MF	10%	250V
C842	1-136-559-11	MYLAR	0.0047MF	10%	400V
C863	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C873	1-162-115-00	CERAMIC	330PF	10%	2KV
C874	1-164-645-11	CERAMIC	1000PF	10%	500V
C875	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C892	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
		< CONNECTOR >			
CN0009	1-568-878-51	PIN, CONNECTOR 3P			
CN0501	*1-564-516-11	PLUG, CONNECTOR 13P			
CN0503	1-764-607-11	CONNECTOR, BOARD TO BOARD 8P			
CN0504	1-764-607-11	CONNECTOR, BOARD TO BOARD 8P			
CN0505	1-764-607-11	CONNECTOR, BOARD TO BOARD 8P			
CN0521	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P			
DY1	*1-580-798-11	CONNECTOR PIN (DY) 6P			
		< DIODE >			
D802	8-719-979-99	DIODE ERD08M-15			
D803	8-719-043-14	DIODE ESAD39M-06C			
D804	8-719-971-20	DIODE ERC38-06			
D805	8-719-908-03	DIODE GP08D			
D806	8-719-908-03	DIODE GP08D			
D811	8-719-302-43	DIODE EL1Z			
D812	8-719-510-26	DIODE D1NL20			
D813	8-719-510-26	DIODE D1NL20			
D815	8-719-110-13	DIODE RD9.1ESB2			
D872	8-719-914-43	DIODE DAN202K			
D874	8-719-914-42	DIODE DA204K			
		< FERRITE BEAD >			
FB801	1-410-396-51	FERRITE BEAD INDUCTOR 0.45UH			
FB802	1-410-396-51	FERRITE BEAD INDUCTOR 0.45UH			

REF.NO.	PART NO.	DESCRIPTION				REMARK
FB803	1-410-396-51	FERRITE BEAD INDUCTOR 0.45UH				
		< IC >				
IC801	8-759-103-93	IC UPC393C				
		< COIL >				
L801	1-459-123-00	COIL, DUST CORE (PAC)				
L802	1-459-123-00	COIL, DUST CORE (PAC)				
L803	1-459-123-00	COIL, DUST CORE (PAC)				
L811	1-459-104-00	COIL, WITH CORE				
L813	1-459-104-00	COIL, WITH CORE				
L814	1-422-613-11	COIL, AIR CORE				
L815	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH				
L816	1-408-947-00	INDUCTOR	2.2MMH			
		< TRANSISTOR >				
Q801	8-729-119-80	TRANSISTOR 2SC2688-LK				
Q802	8-729-821-07	TRANSISTOR 2SC3997CA				
Q803	8-729-931-45	TRANSISTOR IRF614				
		< RESISTOR >				
JR502	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR503	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR504	1-216-295-91	METAL GLAZE	0	5%	1/10W	
R802	1-215-916-00	METAL OXIDE	680	5%	3W	F
R803	1-215-916-00	METAL OXIDE	680	5%	3W	F
R804	1-215-916-00	METAL OXIDE	680	5%	3W	F
R805	1-215-923-00	METAL OXIDE	10K	5%	3W	F
R806	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R807	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R808	1-216-385-11	METAL OXIDE	0.47	5%	3W	F
R809	1-215-880-00	METAL OXIDE	10	5%	2W	F
R810	1-215-914-11	METAL OXIDE	330	5%	3W	F
R811	1-216-434-11	METAL OXIDE	1.8K	5%	1W	F
R817	1-202-972-61	FUSIBLE	1	5%	1/4W	F
R818	1-249-377-11	CARBON	0.47	5%	1/4W	F
R819	1-249-377-11	CARBON	0.47	5%	1/4W	F
R820	1-214-907-00	METAL	56K	1%	1/2W	
R821	1-249-428-11	CARBON	8.2K	5%	1/4W	
R823	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R835	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R837	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R842	1-249-887-11	CARBON	33	5%	1/4W	F
R843	1-202-822-00	SOLID	2.2K	20%	1/2W	
R844	1-249-424-11	CARBON	3.9K	5%	1/4W	
R845	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R850	1-249-389-11	CARBON	4.7	5%	1/4W	F
R851	1-216-374-00	METAL OXIDE	2.7	5%	2W	F
R852	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R853	1-216-117-00	METAL GLAZE	680K	5%	1/10W	
R854	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R855	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R856	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R857	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R858	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R859	1-202-822-00	SOLID	2.2K	20%	1/2W	
R894	1-216-295-91	METAL GLAZE	0	5%	1/10W	
R895	1-215-866-11	METAL OXIDE	330	5%	1W	F
R896	1-216-295-91	METAL GLAZE	0	5%	1/10W	

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R897	1-216-295-91	METAL GLAZE	270K	5%	1/10W	
R898	1-216-115-00	METAL GLAZE	560K	5%	1/10W	
R899	1-216-117-00	METAL GLAZE	680K	5%	1/10W	

< TRANSFORMER >

REF.NO.	PART NO.	DESCRIPTION	REMARK
T801	1-427-762-11	TRANSFORMER, FERRITE (HDT)	
T803	1-426-897-11	TRANSFORMER, FERRITE (PMT)	
T804	1-429-287-11	COIL, HORIZONTAL LINEARITY	
T805 ⚠	**1-453-187-11**	**TRANSFORMER ASSY, FLYBACK (NX-2661/U2E)**	
T806	1-413-059-00	TRANSFORMER, FERRITE (DFT)	

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*A-1644-065-A VM BOARD, COMPLETE
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*4-368-683-21 SPRING, TRANSISTOR
4-382-854-11 SCREW (M3X10), P, SW (+)

< CAPACITOR >

REF.NO.	PART NO.	DESCRIPTION				REMARK
C1701	1-126-933-11	ELECT	100MF	20%	16V	
C1702	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C1703	1-126-933-11	ELECT	100MF	20%	16V	
C1704	1-126-933-11	ELECT	100MF	20%	16V	
C1705	1-107-638-11	ELECT	33MF	20%	160V	
C1706	1-104-999-11	FILM	0.1MF	5%	200V	
C1707	1-104-989-91	FILM	0.0022MF	5%	200V	
C1708	1-137-364-11	FILM	0.001MF	5%	50V	
C1709	1-137-364-11	FILM	0.001MF	5%	50V	
C1720	1-107-667-11	ELECT	2.2MF	20%	160V	
C1721	1-104-989-91	FILM	0.0022MF	5%	200V	
C1722	1-128-581-11	ELECT	4.7MF	20%	100V	
C1723	1-161-830-00	CERAMIC	0.0047MF		500V	
C1841	1-130-481-00	FILM	0.0068MF	5%	50V	
C1844	1-106-367-00	MYLAR	0.01MF	10%	400V	
C1845	1-106-220-00	MYLAR	0.1MF	10%	100V	

< CONNECTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN1015	*1-568-881-51	PIN, CONNECTOR 6P	

< DIODE >

REF.NO.	PART NO.	DESCRIPTION	REMARK
D1701	8-719-991-33	DIODE 1SS133T-77	
D1702	8-719-110-88	DIODE RD39ESB2	
D1703	8-719-110-88	DIODE RD39ESB2	
D1840	8-719-302-43	DIODE EL1Z	
D1841	8-719-991-33	DIODE 1SS133T-77	

< COIL >

REF.NO.	PART NO.	DESCRIPTION		REMARK
L1701	1-408-603-41	INDUCTOR	10UH	
L1702	1-408-597-41	INDUCTOR	3.3UH	
L1703	1-408-603-41	INDUCTOR	10UH	
L1841	1-459-075-00	COIL, DYNAMIC CONVERSION CHOKE		
L1843	1-459-104-00	COIL, WITH CORE		

< TRANSISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q1701	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1703	8-729-017-05	TRANSISTOR 2SA1837	
Q1704	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1705	8-729-173-38	TRANSISTOR 2SA733-K	
Q1706	8-729-017-06	TRANSISTOR 2SC4793	
Q1707	8-729-255-12	TRANSISTOR 2SC2551-O	
Q1840	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1841	8-729-017-06	TRANSISTOR 2SC4793	

< RESISTOR >

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1701	1-249-417-11	CARBON	1K	5%	1/4W	
R1702	1-249-417-11	CARBON	1K	5%	1/4W	
R1703	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1704	1-249-415-11	CARBON	680	5%	1/4W	
R1705	1-247-791-91	CARBON	22	5%	1/4W	
R1706	1-247-791-91	CARBON	22	5%	1/4W	
R1707	1-247-807-31	CARBON	100	5%	1/4W	
R1708	1-249-410-11	CARBON	270	5%	1/4W	
R1709	1-249-401-11	CARBON	47	5%	1/4W	
R1710	1-249-401-11	CARBON	47	5%	1/4W	
R1711	1-249-429-11	CARBON	10K	5%	1/4W	
R1712	1-260-311-11	CARBON	39	5%	1/2W	
R1713	1-249-384-11	CARBON	1.8	5%	1/4W	F
R1714	1-249-414-11	CARBON	560	5%	1/4W	F
R1715	1-249-432-11	CARBON	18K	5%	1/4W	
R1716	1-249-417-11	CARBON	1K	5%	1/4W	F
R1717	1-216-476-11	METAL OXIDE	180	5%	3W	F
R1718	1-249-432-11	CARBON	18K	5%	1/4W	
R1719	1-249-384-11	CARBON	1.8	5%	1/4W	F
R1720	1-249-400-11	CARBON	39	5%	1/4W	F
R1721	1-249-414-11	CARBON	560	5%	1/4W	
R1722	1-249-401-11	CARBON	47	5%	1/4W	
R1723	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1841	1-247-871-91	CARBON	47K	5%	1/4W	
R1842	1-247-764-11	CARBON	10K	5%	1/2W	
R1843	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1844	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1847	1-249-887-11	CARBON	33	5%	1/4W	F
R1848	1-215-875-11	METAL OXIDE	10K	5%	1W	F
R1849	1-247-764-11	CARBON	10K	5%	1/2W	

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*A-1646-101-A H1 BOARD, COMPLETE
****

1-568-678-11 TERMINAL BLOCK, S 3P
1-764-606-11 JACK

< CAPACITOR >

REF.NO.	PART NO.	DESCRIPTION				REMARK
C081	1-102-973-00	CERAMIC	100PF	5%	50V	
C082	1-102-973-00	CERAMIC	100PF	5%	50V	
C083	1-101-005-00	CERAMIC	0.022MF		50V	
C087	1-101-005-00	CERAMIC	0.022MF		50V	

< CONNECTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN1113	*1-568-879-11	PIN, CONNECTOR 4P	
CN1123	*1-564-512-11	PLUG, CONNECTOR 9P	

< COIL >

REF.NO.	PART NO.	DESCRIPTION		REMARK
L081	1-408-409-00	INDUCTOR	10UH	
L082	1-408-409-00	INDUCTOR	10UH	

< RESISTOR >

REF.NO.	PART NO.	DESCRIPTION				REMARK
R081	1-249-429-11	CARBON	10K	5%	1/4W	
R082	1-249-425-11	CARBON	4.7K	5%	1/4W	
R083	1-249-421-11	CARBON	2.2K	5%	1/4W	
R084	1-249-419-11	CARBON	1.5K	5%	1/4W	

H1 H2 J

REF.NO.	PART NO.	DESCRIPTION	REMARK
R085	1-249-419-11	CARBON 1.5K 5%	1/4W

< SWITCH >

REF.NO.	PART NO.	DESCRIPTION	REMARK
S081	1-571-532-21	SWITCH, TACTIL	
S082	1-571-532-21	SWITCH, TACTIL	
S083	1-571-532-21	SWITCH, TACTIL	

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*A-1646-100-A H2 BOARD, COMPLETE
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REF.NO.	PART NO.	DESCRIPTION	REMARK
	*4-374-987-01	GUIDE, LIGHT	
	4-381-686-01	BRACKET (B), LIGHT GUIDE	

< CONNECTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN1214	*1-564-511-11	PLUG, CONNECTOR 8P	

< DIODE >

REF.NO.	PART NO.	DESCRIPTION	REMARK
D092	8-719-948-31	DIODE LD-201VR	
	*4-201-076-01	HOLDER, LED ; D092	
D093	8-719-948-31	DIODE LD-201VR	
	*4-201-076-01	HOLDER, LED ; D093	
D094	8-719-948-31	DIODE LD-201VR	
	*4-201-076-01	HOLDER, LED ; D094	

< IC >

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC091	8-741-810-11	IC SBX1810-11	

< RESISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
R091	1-249-413-11	CARBON 470 5%	1/4W

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*A-1651-074-A J BOARD, COMPLETE
****

< CAPACITOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
C270	1-163-063-00	CERAMIC CHIP 0.022MF	50V
C271	1-163-063-00	CERAMIC CHIP 0.022MF	50V
C273	1-101-003-00	CERAMIC 0.0047MF	50V
C274	1-101-003-00	CERAMIC 0.0047MF	50V
C275	1-101-005-00	CERAMIC 0.022MF	50V
C290	1-101-005-00	CERAMIC 0.022MF	50V
C295	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C296	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C401	1-164-005-11	CERAMIC CHIP 0.47MF	16V
C402	1-126-933-11	ELECT 100MF 20%	16V
C403	1-164-005-11	CERAMIC CHIP 0.47MF	16V
C410	1-126-966-11	ELECT 33MF 20%	50V
C421	1-126-967-11	ELECT 47MF 20%	50V
C422	1-126-967-11	ELECT 47MF 20%	50V
C423	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C424	1-163-129-00	CERAMIC CHIP 330PF 5%	50V
C425	1-163-129-00	CERAMIC CHIP 330PF 5%	50V
C426	1-126-967-11	ELECT 47MF 20%	16V
C427	1-164-346-11	CERAMIC CHIP 1MF	16V
C428	1-164-346-11	CERAMIC CHIP 1MF	16V
C429	1-126-940-11	ELECT 330MF 20%	16V
C901	1-163-011-11	CERAMIC CHIP 0.0015MF 10%	50V
C902	1-163-011-11	CERAMIC CHIP 0.0015MF 10%	50V
C904	1-163-129-00	CERAMIC CHIP 330PF 5%	50V
C905	1-163-129-00	CERAMIC CHIP 330PF 5%	50V
C906	1-101-004-00	CERAMIC 0.01MF	50V
C907	1-163-129-00	CERAMIC CHIP 330PF 5%	50V
C908	1-163-129-00	CERAMIC CHIP 330PF 5%	50V
C909	1-101-004-00	CERAMIC 0.01MF	50V
C910	1-163-017-00	CERAMIC CHIP 0.0047MF 10%	50V
C911	1-163-017-00	CERAMIC CHIP 0.0047MF 10%	50V
C912	1-163-129-00	CERAMIC CHIP 330PF 5%	50V
C913	1-163-129-00	CERAMIC CHIP 330PF 5%	50V
C914	1-163-129-00	CERAMIC CHIP 330PF 5%	50V
C915	1-163-129-00	CERAMIC CHIP 330PF 5%	50V
C916	1-163-011-11	CERAMIC CHIP 0.0015MF 10%	50V
C917	1-163-011-11	CERAMIC CHIP 0.0015MF 10%	50V
C918	1-163-121-00	CERAMIC CHIP 150PF 5%	50V
C919	1-163-121-00	CERAMIC CHIP 150PF 5%	50V
C920	1-163-011-11	CERAMIC CHIP 0.0015MF 10%	50V
C921	1-163-011-11	CERAMIC CHIP 0.0015MF 10%	50V
C922	1-126-967-11	ELECT 47MF 20%	16V
C923	1-164-346-11	CERAMIC CHIP 1MF	16V
C924	1-126-967-11	ELECT 47MF 20%	16V
C925	1-126-967-11	ELECT 47MF 20%	16V
C926	1-164-346-11	CERAMIC CHIP 1MF	16V
C928	1-126-967-11	ELECT 47MF 20%	16V
C929	1-126-967-11	ELECT 47MF 20%	16V
C930	1-126-967-11	ELECT 47MF 20%	16V
C931	1-164-346-11	CERAMIC CHIP 1MF	16V
C932	1-164-346-11	CERAMIC CHIP 1MF	16V
C933	1-126-967-11	ELECT 47MF 20%	16V
C935	1-126-967-11	ELECT 47MF 20%	16V
C936	1-164-346-11	CERAMIC CHIP 1MF	16V
C937	1-164-346-11	CERAMIC CHIP 1MF	16V
C938	1-126-967-11	ELECT 47MF 20%	16V

< CONNECTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN0806	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P	
CN0807	1-695-300-11	CONNECTOR, BOARD TO BOARD 20P	
CN0823	1-564-524-11	PLUG, CONNECTOR 9P	
CN0824	*1-564-518-11	PLUG, CONNECTOR 3P	
CN0825	*1-564-518-11	PLUG, CONNECTOR 3P	

< DIODE >

REF.NO.	PART NO.	DESCRIPTION	REMARK
D401	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D403	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D405	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D406	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D407	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D901	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D902	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D903	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D904	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D905	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D906	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D907	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D908	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D909	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D910	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D911	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D913	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D914	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D915	8-719-923-60	DIODE MTZJ-T-77-9.1A	

REF.NO.	PART NO.	DESCRIPTION	REMARK
D916	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D917	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D919	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D920	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D921	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D922	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D923	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D924	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D925	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D926	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D927	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D928	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D930	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D931	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D932	8-719-923-60	DIODE MTZJ-T-77-9.1A	

< IC >

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC401	8-752-068-46	IC CXA1855S	
IC402	8-759-073-00	IC TEA2114	

< SOCKET >

REF.NO.	PART NO.	DESCRIPTION	REMARK
J291	1-537-979-11	TERMINAL BOARD	
J292	1-537-978-11	TERMINAL BOARD	
J901	1-695-296-11	TERMINAL BLOCK, S	
J903	1-561-534-41	SOCKET, PIN 21P	
J904	1-695-296-11	TERMINAL BLOCK, S	
J905	1-695-293-11	SOCKET 21P	
J906	1-695-296-11	TERMINAL BLOCK, S	
J907	1-695-293-11	SOCKET 21P	

< COIL >

REF.NO.	PART NO.	DESCRIPTION	REMARK
L284	1-402-711-11	INDUCTOR, WIDEBAND	
L291	1-402-711-11	INDUCTOR, WIDEBAND	
L292	1-402-711-11	INDUCTOR, WIDEBAND	
L294	1-402-711-11	INDUCTOR, WIDEBAND	
L295	1-402-711-11	INDUCTOR, WIDEBAND	
L296	1-402-711-11	INDUCTOR, WIDEBAND	

< TRANSISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q401	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q402	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q403	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q404	8-729-920-74	TRANSISTOR 2SC2412K-QR	

< RESISTOR >

REF.NO.	PART NO.	DESCRIPTION				REMARK
JR285	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR288	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR291	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR292	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR294	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR296	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR297	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR298	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR401	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR402	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR403	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR404	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR405	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR406	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR407	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR408	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR901	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR905	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR907	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR908	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR909	1-216-295-91	METAL GLAZE	0	5%	1/10W	
JR910	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JR911	1-216-295-91	METAL GLAZE	0	5%	1/8W	
R283	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R284	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R285	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R286	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R291	1-216-190-00	METAL GLAZE	470	5%	1/8W	
R292	1-216-190-00	METAL GLAZE	470	5%	1/8W	
R293	1-216-216-00	METAL GLAZE	5.6K	5%	1/8W	
R294	1-216-216-00	METAL GLAZE	5.6K	5%	1/8W	
R401	1-216-158-00	METAL GLAZE	22	5%	1/8W	
R403	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R404	1-216-158-00	METAL GLAZE	22	5%	1/8W	
R405	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R406	1-216-158-00	METAL GLAZE	22	5%	1/8W	
R407	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R410	1-216-174-00	METAL GLAZE	100	5%	1/8W	
R411	1-216-174-00	METAL GLAZE	100	5%	1/8W	
R412	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R413	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R414	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R416	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R417	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R419	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R420	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R421	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R423	1-216-015-00	METAL GLAZE	39	5%	1/10W	
R424	1-216-174-00	METAL GLAZE	100	5%	1/8W	
R425	1-216-174-00	METAL GLAZE	100	5%	1/8W	
R428	1-249-393-11	CARBON	10	5%	1/4W	F
R429	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R430	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R431	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R432	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R433	1-216-296-91	METAL GLAZE	0	5%	1/8W	
R434	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R435	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R436	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R437	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R438	1-216-296-91	METAL GLAZE	0	5%	1/8W	
R439	1-216-296-91	METAL GLAZE	0	5%	1/8W	
R440	1-216-296-91	METAL GLAZE	0	5%	1/8W	
R901	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R902	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R903	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R904	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R905	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R906	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R907	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R908	1-216-171-00	METAL GLAZE	75	5%	1/8W	
R909	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R910	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R911	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R913	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W	

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The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	REMARK
R914	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R915	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R916	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R917	1-216-171-00	METAL GLAZE 75 5% 1/8W	
R918	1-216-171-00	METAL GLAZE 75 5% 1/8W	
R919	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R920	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R921	1-216-022-00	METAL GLAZE 75 5% 1/10W	
R922	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R923	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R924	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R925	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R926	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R927	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R928	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R929	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R930	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R931	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R932	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R933	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R934	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R935	1-216-022-00	METAL GLAZE 75 5% 1/10W	
R936	1-216-171-00	METAL GLAZE 75 5% 1/8W	
R937	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R938	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R939	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R940	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R941	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R942	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R943	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R944	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R945	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R946	1-216-022-00	METAL GLAZE 75 5% 1/10W	
R948	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R949	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R950	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R951	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R952	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R953	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R954	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R955	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R956	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R957	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R958	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R959	1-216-674-11	METAL CHIP 9.1K 0.50% 1/10W	
R960	1-216-674-11	METAL CHIP 9.1K 0.50% 1/10W	
R961	1-216-674-11	METAL CHIP 9.1K 0.50% 1/10W	
R967	1-216-171-00	METAL GLAZE 75 5% 1/8W	
R968	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R969	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R970	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R971	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R972	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R973	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R974	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R975	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R976	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R977	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	

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MISCELLANEOUS
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REF.NO.	PART NO.	DESCRIPTION	REMARK
	⚠ 1-406-807-11	COIL, DEGAUSSING	
	1-452-032-00	MAGNET, DISK; 10MM Ø	
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
	⚠ 1-452-724-11	COIL, NA ROTATION (RT-165)	
	⚠ 1-453-187-11	TRANSFORMER ASSY, FLYBACK (NX-2661/U2E)	
	1-504-121-21	SPEAKER (SQUAWKER) (5CM)	
	1-504-145-11	SPEAKER (12CM)	
	⚠ 1-540-006-22	CAP ASSY, HIGH-VOLTAGE	
	⚠ 1-571-433-21	SWITCH, PUSH (AC POWER)	
	1-693-315-11	TUNER (UV1316) (KV-S2951A/S2953B/S2951D/S2953E/S2951K)	
	1-693-314-11	TUNER (U1344) (KV-S2952U)	
	⚠ 1-751-680-11	CORD, POWER (WITH NOISE FILTER) 2.5A/250V (KV-S2951A/S2953B/S2951D/S2953E/S2951K)	
	⚠ 1-590-762-11	CORD, POWER (WITH PLUG) 2.5A/250V	(KV-S2952U)
V901	⚠ 8-733-856-05	PICTURE TUBE (SD-269)(M68LCT60X)	
	⚠ 8-451-466-11	DEFLECTION YOKE (Y29GXC2B)	

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ACCESSORIES AND PACKING MATERIALS
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REF.NO.	PART NO.	DESCRIPTION	REMARK
	1-765-654-11	CABLE, SPEAKER	
	*4-202-105-01	CUSHION (LOWER) (ASSY)	
	*4-203-184-01	INDIVIDUAL CARTON	
	*4-203-185-11	CUSHION (UPPER) (ASSY)	
	*4-395-957-01	BAG, PROTECTION	
	4-203-181-41	MANUAL, INSTRUCTION (KV-S2951A) (ITALIAN)	
	4-203-181-51	MANUAL, INSTRUCTION (KV-S2953B) (FRENCH/GERMAN/ITALIAN)	
	4-203-181-11	MANUAL, INSTRUCTION (KV-S2951D) (GERMAN/ENGLISH/DUTCH/GREEK)	
	4-203-181-71	MANUAL, INSTRUCTION (KV-S2953E) (SPANISH/DANISH/SWEDISH/PORTUGUESE/NORWEGIAN/FINNISH/FRENCH/DUTCH/GERMAN)	
	4-203-181-91	MANUAL, INSTRUCTION (KV-S2951K) (ENGLISH/RUSSIAN/CZECH/HUNGARIAN/POLISH/BULGARIAN)	
	4-203-181-61	MANUAL, INSTRUCTION (KV-S2952U) (ENGLISH)	

REMOTE COMMANDER
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REF.NO.	PART NO.	DESCRIPTION	REMARK
	1-466-854-41	COMMANDER, STANDARD TYPE (RM-860)	
	1-467-272-21	COMMANDER, STANDARD TYPE (RM-831)	
	9-903-466-01	POCKET, COVER (FOR RM-831)	

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